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ABSTRACT

In order to be able to comply, and to be able to document their compliance, with federal legislation regarding health occupations education and discriminatory practices, the American Medical Record Association conducted a study to see if a data base could be built to validate proficiency tests for medical personnel. The report was prepared to document the structure, processes, and outcomes of the study, the Role and Functions Project. Six major concerns were: patient care standards, acceptability to health care field, integrity of medical record profession, occupational levels for proficiency tests, relevancy to job performance, and career mobility. The report discusses purpose, methodology, results, conclusions, medical record models, and recommendations. It contains 45 conclusions, three analytic models, and 15 action recommendations. About two-thirds of the report is devoted to appendixes: policies for the development of credentialing mechanisms for health personnel; a 20-page bibliography; reports on State Medical Record Associations' Tasks 1 and 2; final report on affect measurement of medical record personnel; and formative evaluation report for roles, functions, training, and proficiency tests for medical record personnel project. (Author/EC)

ROLES, FUNCTIONS, TRAINING, AND PROFICIENCY TESTS

FOR MEDICAL RECORD PERSONNEL

FINAL REPORT

A STUDY to DELINEATE ROLES AND FUNCTIONS of MEDICAL RECORD PERSONNEL

AMERICAN MEDICAL RECORD ASSOCIATION

875 North Michigan Ave. / Suite 1850, Chicago, Ill. 60611

JUNE, 1975

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875 North Michigan Avenue — Suite 1850
John Hancock Center
Chicago, Illinois 60611

June 30, 1975

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This Final Report presents the results of the Roles and Functions Project conducted by the American Medical Record Association (AMRA) of Chicago, Illinois, and funded by the U. S. Department of Health, Education and Welfare, Bureau of Health Resources Development (HEW/BHRD).

The Project Staff is grateful to Mr. Thomas Hatch and Dr. Robert Conant of BHRD for their encouragement and sustaining support of this project.

We also gratefully acknowledge the patient help received from the 27 Advisors, the 15 Work Group Members, our own AMRA Staff and our Consultants with the difficult conceptual and methodological problems encountered.

Appreciation is also expressed to the State Medical Record Associations, who took time from their busy schedules to validate the project data and provide the project with a look at the "real-world" issues.

There were literally dozens of others who offered assistance and support to this effort. To all those a heart-felt, "Thank you."

Fredric A. Clark
Project Administrator

TABLE OF CONTENTS

TABLE OF CONTENTS
(continued)

GLOSSARY

AREA:	See Functional Area
BEHAVIORAL OBJECTIVE:	A statement fully defining one performance (or task). The performance can be an act of recall, comprehension, application, analysis, synthesis or evaluation. A behavioral objective can also define an affective response.
COURSE:	A set of learning experiences. In a formal school setting a course is normally defined by time: a semester or quarter.
EDUCATIONAL TAXONOMY:	A classification system for rating behavioral objectives. See Taxonomy of Educational Objectives, edited by B. S. Bloom and published by McKay, N.Y.C.
ELEMENT(S):	See Functional Elements.
EQUIVALENCY TESTING:	Equivalency testing evaluates knowledge acquired through alternate learning experience as a substitute for established academic requirements.
FUNCTION:	"Actions to be performed" (Webster); Performance. * NOTE * For analysis purposes, "roles" were studied separate from "functions"
FUNCTIONAL ELEMENTS:	A system adopted by the Roles and Functions Project to classify functions. There were 19 functional elements identified (18 specific: 1 open). The functional elements contain knowledge-based and skill behavioral objectives.
LEVEL (OCCUPATIONAL LEVEL:	See Role.
LEVEL-OF-PERFORMANCE:	A measure of performance. The Roles and Functions Project, for analysis purposes, use Blooms Taxonomy as a measure (See Educational Taxonomy).
PERFORMANCE:	The part of a behavioral objective which defines the one specific act to be done or performed. A performance should contain an action verb (list, rank, define, compare. etc.) and key words which identify the action to be done.

PROFICIENCY TESTING: Proficiency testing assesses an individual's technical knowledge and skills related to the performance requirements of a specific job.

PROFILES: A weighted composite of elements or roles which define an occupational title, such as MRA or MRT. Profiles have been synthesized for RRA and ART by various groups. Profiles can be replicated by any group.

PROGRAM: A set of courses; a curriculum for a medical record occupational title. Typically MRA or MRT.

ROLE: MRA and MRT can be considered as composite of many roles, including the Consulting Role, the Administrative Role, the Supervisory Role, the Technical Role, the Transcription Role and the Clerical Role.

*** NOTE ***

Role does <u>not</u> mean RRA or ART. RRA or ART is not one role, but a composite of many roles.

UNIT: A subdivision of a course, variable in length depending upon subject matter and difficulty. Also known as Instructional Unit or Unit of Study.

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SECTION I
PURPOSE

GENERAL

The Final Report is prepared to document the structure, processes and outcomes of "A Study to Delineate Roles and Functions of Medical Record Personnel," known as the Roles and Functions Project. The document completes the reporting requirements of PHS/HRA/BHRD Contract No. NO1-AH-34096.

HISTORY

Prior to 1966, there was little federal influence felt in the Allied Health Professions. With the passage of PL89-751 (Allied Health Professions Training Act of 1966), the U.S. Department of Health, Education and Welfare moved into these areas with support for schools and other organizations with an intent to improve the quality of patient care by improving the education of those providing that care.

In 1971, PL91-519 further amended the law to extend further assistance in training of allied health workers. Then on March 23, 1972, PL92-261 (Equal Employment Opportunity Act of 1972) was passed to prevent "unlawful employment practices" which were discriminatory. In addition, PL92-603 became law, and contained in Section 1123 a legal requirement for proficiency tests (See Appendix A for Reprint of Section 1123).

In the MEDIHC Volume 2, (See Appendix A), Maryland Y. Pennell set forth the objectives of BHRD regarding proficiency testing. Their objectives,

required to implement PL92-157 and PL92-603, are:

1. To promote national credentialing systems for the allied health professions that will minimize the difficulties of seeking recognition of qualifications without compromising the standards basic to credentialing.

2. To have such credentialing systems largely or wholly self-sustaining, after initial development of standards and administrative procedures.

3. To develop acceptable and valid methods of determining that an individual is satisfactorily proficient, by an alternative to completion of an accredited educational program.

4. To develop these methods for the established entry-levels of an occupation, such as (a) the technician or assistant level for which an associate degree program or its equivalent is considered desirable preparation, and (b) the technologist or therapist level for which a baccalaureate program is the normal preparation.

5. To promote a set of standards for proficiency in the allied health field for specific occupations, so that these standards may serve:

    a. To confer certification or registration for the occupation.
    b. As objectives for the educational programs, including continuing education activities.
    c. For licensing or registration by government agencies.
    d. To satisfy Federal requirements for the qualification of manpower employed by non-Federal institutions or agencies.

Taken individually, the various laws, issues, implications and direct impact on medical records could be quickly analyzed and reported. However, taken together the laws and other actions are extremely difficult to analyze without extensive research.

On April 6, 1973, a Request for Proposal (RFP) was received from the National Institute of Health, Bureau of Health Manpower Education. This RFP is contained in Appendix B. It appeared that AMRA could go one

of two ways. Either AMRA could refuse to be involved and have the government develop medical record tests at one or more levels or AMRA could research the entire spectrum of issues and concerns and have some influence in the destiny of medical record practice.

OPERATIONAL STRATEGY

As AMRA analyzed the RFP, it became apparent that AMRA involvement would necessitate some basic research into the overall feasibility of proficiency testing at various levels within the field.

In progression of analyzation four basic questions surfaced requiring further study. They were:

1. Do the laws on proficiency testing in the health fields apply to medical record department personnel?

2. Can a test be prepared which will actually measure the competencies required?

3. Can we define these competencies in enough detail to satisfy:

   a. The users of medical record services?

   b. The AMRA membership?

4. If tests are developed and found valid, how would it affect our professional status?

As a result, an operational strategy was developed. A federally supported research effort would be proposed to provide a comprehensive and viable research data base. Using the base, AMRA could then make valid and defensible decisions in regard to proficiency testing.

CONCERNS TO BE INVESTIGATED

AMRA had some concerns in regard to the Bureau of Health Resources Development objectives. Six major concerns of AMRA were:

1. Patient Care Standards
2. Acceptability to Health Care Field
3. Integrity of Medical Record Profession
4. Occupational Levels for Proficiency Tests
5. Relevancy to Job Performance
6. Career Mobility

Comments on each of these concerns follows:

1. PATIENT CARE STANDARDS

   The primary concern of all project efforts undertaken must support and upgrade the quality of patient care.

2. ACCEPTABILITY TO HEALTH CARE FIELD

   a. The end products (roles and functions, curriculum guide, and proficiency tests) must be acceptable to the health care field. An Advisory Council must advise the Project Staff as to the acceptability of:

      (1) The Operations Plan
      (2) Methodology
      (3) Adequacy of Input Data
      (4) Definition of Levels, Roles and Functions
      (5) Proficiency Testing for Credentialing for Specific Levels

   b. Acceptability of level selection for testing to the various health care institution types, e.g., Nursing Homes, Ambulatory Care Centers, Neighborhood Health Centers, etc.

   c. Acceptability of outcomes to the medical record field.

   d. Shall be sensitive to the needs of the various employers of medical record personnel.

3. INTEGRITY OF MEDICAL RECORDS PROFESSION

In the two prime factors affecting medical record practice (1) health care, and (2) data systems, the environment, state of knowledge and practice is changing rapidly. To maintain the integrity of the profession, AMRA must keep pace with these changes. The roles, functions and job performance requirements of medical record practitioners may be expected to change; however, the mechanism for proficiency testing must provide for updating of the test instruments and even for such radical change as the level of role to be tested.

A regular, periodic review and revision (as needed) of the proficiency tests and mechanisms must be included in the plan.

4. AT WHAT LEVELS SHOULD PROFICIENCY TESTS BE ADMINISTERED?

Is Proficiency Testing appropriate for the:

a. Administrator level?
b. Technician Level?
c. Transcriptionist Level?
d. Coding Personnel Level?
e. Statistical & Analytic Personnel Level?
f. All Levels.

5. RELEVANCY TO JOB PERFORMANCE

The end products must guarantee adequate performance on the job. AMRA in responding to the RFP and accepting the contract had a firm commitment to investigate the concept of proficiency testing and the feasibility of applying it to the medical record field.

6. CAREER MOBILITY

The end products must allow for career mobility within the medical record field. A career ladder should be defined to allow for promotion and progression to those who wish to advance in medical records.

NOTE

The Project has a firm commitment to work with BHRD to see if concerns can be resolved.

PROPOSED OUTCOMES

The proposed outcomes of a research effort such as this project include:

1. Delineation of actual roles and functions of personnel at all levels in the field of medical records.
2. Identification of appropriate roles, functions and responsibilities of medical record personnel at all levels.
3. Development of a bank of task statements (behavioral objectives) covering all areas of medical record practice.

4. Preparation of educational curriculum guide for use by teachers and other educators.

5. Exploration of levels of medical record personnel for which it may be appropriate and feasible to develop proficiency examinations.

6. Options and recommendations regarding proficiency testing.

The physical documents to be prepared should include:

1. Guidebook: A Guide to Curriculum Management.

2. Report: 18 Years of Change -- 1957-1975 Functional Changes in Medical Record Practice.

3. Report: A Comparative Analysis of Selected MRA and MRT Educational Programs

4. Reference: A Bank of Behavioral Objectives on Medical Record Practice

5. Final Report: Final Report - A Study to Delineate Roles and Functions of Medical Record Personnel

ORGANIZATION OF FINAL REPORT

Answers to the following questions are found in sections organized as shown below:

QUESTION	SECTION	TITLE
1. Why was the project done?	I	PURPOSE
2. What was done and how?	II	METHODOLOGY
3. What new data was generated?	III	RESULTS
4. What conclusions were reached?	IV	CONCLUSIONS
5. What are the elements on MR Models?	V	MODEL PROGRAM
6. What recommendations can be made?	VI	RECOMMENDATIONS

SECTION II
METHODOLOGY

GENERAL

This section of the Report discusses the project plan and the operational criteria. It contains six parts, which are:

- General
- Scope of Effort
- Operational Phases
- Types of Data Collected
- Informational Resources Produced
- Typical Procedures

SCOPE OF EFFORT

This is really not one study, but a collection of studies designed to provide:

1. A fresh, viable, overall-view of the medical record field.
2. A critical analysis of the issues, legal mandates, options and opinions which cloud the proficiency-testing picture.
3. Analysis and decision-making tools for:
   a. Policy Makers
   b. Educators
   c. Educational Materials Developers
   d. Researchers

During the design phase, the Project Staff was constantly aware that the purpose of the effort was to investigate and document issues, alternatives and options concerning the area of roles, functions, training and proficiency tests.

OPERATIONAL PHASES

The Project was designed to have six major phases which were:

PHASE I - Setup and planning
PHASE II - Analysis
PHASE III - Review*
PHASE IV - Development of Behavioral Objectives
PHASE V - Preparation of Curriculum Guide
PHASE VI - Preparation of Final Report

* By State Medical Record Associations (SMRA's)

The plan was to have the phases occur serially; however, due to governmental delays in processing contract amendments, portions of Phases III, IV, and V occurred simultaneously.

* NOTE *

It was AMRA's intention to involve the SMRA's early in Phase III, REVIEW; however, due to government funding, the SMRA review did not occur until late in the contract.

TYPES OF DATA COLLECTED

This study was designed to investigate information of four major types. They include:

1. Data used for the study design
2. Existing Literature
3. Expert Information
4. Acquired Objective Data

The major data sources included:

EXISTING LITERATURE

- Task Analyses
- Training Documents
- Textbooks
- Research Reports
- Articles
- Reference Books

EXPERT INFORMATION

- Project Staff (6)
- Advisory Council Members (37)
- Staff Educational Committee Members (11)
- Work Group Members (16)
- State Medical Record Association Review Committee Members (412)
- Consultants (6)

OTHER DATA COLLECTION METHODS

- Mail Survey (247 institutions)
- Interviews (12 institutions)
- Meetings (23)
- Expert Reviews (5)
- State-level Reviews (47)

See the Bibliography in the Appendix for the references used.

INFORMATIONAL RESOURCES PRODUCED

The Project produced a number of new resources, some of which may be of continuing value to the medical record field. The new information includes:

1. Revised Project Proposal
2. Bibliographies
3. List of possible MR Tasks, Functions, Activities and Roles in Medical Records (working document only)
4. Career Mobility Charts (3 preliminary versions)
5. Charts of Functional Areas (3 preliminary versions)
6. Behavioral Objective Outlines; Skill, Knowledge and Affect (working document only)
7. Behavioral Objectives (preliminary working collection)
8. Briefing Documents (8 sets)
9. Summary Sheets of Behavioral Objectives (376)
10. List of Functions for the MR Roles (Consultation, Administration, Supervision, Technical, Transcription, and Clerical)
11. Medical Record Services Quality Methodology Study. Printout includes:
    a. Current Practices
    b. Quantitative Analysis
    c. Performance Indicator
12. Report: A Comparative Analysis of Selected MRA and MRT Educational Programs, AMRA, 1975
13. Report: 18 Years of Change - 1957-1975: Functional Changes in Medical Record Practice, AMRA, 1975. (also known as "Pittsburgh Update")
14. Resource: A Bank of Behavioral Objectives on Medical Record Practice, AMRA, 1975. (also known as the "Rainbow Book")
15. Guidebook: A Guide to Curriculum Management, AMRA, 1975
16. Final Report, which includes
    a. Career Progression Models
    b. Proficiency Testing Models
    c. Educational Models
    d. Action Recommendations

TYPICAL PROCEDURES

Since this Project covered a two-year span and investigated so many various areas, a detailed, step-by-step account of all activities would be voluminous. Therefore, only major procedural information is provided as an overview.

The procedures reported cover the production of:

- The Behavioral Objective Bank
- The Curriculum Guide

* NOTE *

The developmental procedures for 18 Years of Change (Pittsburgh Update) and the Comparative Analysis are contained in their respective reports.

In addition, the Advisory Council involvement will be reviewed.

THE BEHAVIORAL OBJECTIVE BANK

The Work Group members produced the data which became, A Bank of Behavioral Objectives on Medical Record Practice. The procedure used is listed below:

Step 1. The Work Group members were identified and selected (see page ii)

Step 2. The Work Group members were organized into groups to study Skill, Knowledge, and Affect.

Step 3. A literature search was undertaken

Step 4. An initial list of all tasks, functions, skills, performance items, teaching items, and knowledge items was compiled

Step 5. Work Group meetings were scheduled

Step 6. During initial Work Group meetings:

a. Members received an orientation and developed skill in writing complete behavioral objectives.

b. Members assigned task/function areas to individuals.

c. Members attempted to prepare general objectives; however, many theoretical-conceptual-operational questions appeared, such as:

(1) Can one behavioral objective apply to all levels and roles?

(2) How can measures be pre-established for various sizes and types of institutional settings?

(3) Does not an RRA (or ART) do a range of functions, depending upon assigned role?

d. The Project Staff and Work Group members agreed on the following assumptions:

Assumption 1 - Functions can be analyzed separately from roles.

Assumption 2 - After functions have been analyzed and documented, their application to the various occupational levels could be established.

Assumption 3 - A measurement of level-of-performance can be established for each function for each applicable level.

Assumption 4 - The level of performance may vary from level to level.

Step 7. During later meetings (and at "home" facilities), outlines and behavioral objectives were prepared on Summary Sheets. (Refer to the Bank of Behavioral Objectives for samples)

Step 8. The outlines and objectives were reviewed by other Work Group members, the Project Staff and the AMRA Staff Education Committee.

Step 9. The behavioral objectives were fully documented.

Step 10 The overall organization and detailed contents of the Summary Sheets were reviewed by 47 SMRA's (State-level Medical Record Associations).

Step 11 The organization and content of the Summary Sheets was modified.

Step 12 The Bank was updated and published.

* NOTE *

The Bank should evolve continuously, with the field providing the necessary update information.

THE CURRICULUM MANAGEMENT GUIDE

The steps taken to develop the curriculum guide included:

1. Literature Reviewed
2. Needs Identified
3. Educational Processes Investigated
4. Content Recommendations Obtained
5. Literature Searched
6. Literature Synthesized
7. Deficiencies Identified
8. Preparation (section-by-section)
9. Review by AMRA Project Staff (section-by-section)
10. Editing
11. Production of a document entitled, A Guide for Curriculum Management, AMRA, 1975.

* NOTE *

The document will undergo a pre-review/ field-review before it is made available for national dissemination.

ADVISORY COUNCIL INVOLVEMENT

The Contract Document from BHRD contained a requirement for advisory committee, as follows:

"B. In pursuance of the above, the Contractor (AMRA) shall specifically:

1. Establish an Advisory Committee of about 12 to 15 individuals, including representatives of the following interests:

   a. Institutions and organizations employing medical record personnel, including Federal agencies and prepaid group practice.

   b. Medical record personnel -- administrators and technicians.

   c. Specialists who utilize medical record services in connection with the provision of clinical health care to the individual patients; the evaluation of health services, institutions and systems; the determination of health care costs and charges, and payment thereof by third party payors; ensuring the provision of medical records which are suitable and adequate legal documents.

   d. Educators of medical record personnel.

   e. Federal manpower regulatory agencies -- HSMA Division of Medical Care Standards.

   f. NIH Bureau of Health Manpower Education.

   Appointment of individuals to the Advisory Committee shall be subject to the approval of the Project Officer."

The AMRA Roles and Functions Project Advisory Council provided the useful and necessary functions of advisement, direction and evaluation. Three meetings were held during the project period, as follows:

Meeting 1: dealt with evaluation of the structure of the project. The objectives, staffing, phases, methodology, operational details, and proposed products were discussed. Issues were set forth for analysis. Proceedings were published and distributed.

Meeting 2: dealt with process evaluation. The questions asked were, "How are we doing?", "Do the project activities approach the project objectives?" and "Are the actual activities operationally and conceptually viable?". Again, the issues were discussed in light of recent findings and Proceedings were published and distributed.

Meeting 3: dealt with evaluation of actual project outcomes and formulation of comparative profiles for appropriate roles, functional elements and AMRA's options. The apparent consensus was that the project had met its initial goals. The resultant profiles are presented in Sections III and IV.

SECTION III
RESULTS

GENERAL

The Roles and Functions Project has produced many individual products. It is hoped that these will be used as tools for analysis and evaluation, sources of discussion-issues, catalysts for change, and resources for further research and development.

The Project did meet its objectives and produced six (6) documents, including this Final Report. This Report contains 47 conclusions, three analytic models, and 15 action recommendations.

This section is divided into six major parts:

- General
- Legislative/Legal Factors
- State-Level Responses
- Profiles
- Proficiency Testing Mechanisms
- Discussion of End Products

LEGISLATIVE/LEGAL FACTORS

The Project Staff found themselves, again and again, referring to the public laws and the literature of civil rights cases involving the equal employment opportunity and equal educational opportunity.

As reported in Section I, there were three public laws which might affect AMRA members. They are:

- Social Security Act (PL92-603 as amended)
- Civil Rights Act of 1964 (Amended by PL92-261)
- Allied Health Professions Training Act (Amended by PL91-519)

SOCIAL SECURITY ACT (Amended by PL92-603)

Concerning Section 1123 (see next page), the Project Staff has analyzed and re-analyzed, compared, pondered over, critized, and re-reviewed these paragraphs.

The review always resulted in the identification of three main elements. Under this law, the three elements are:

1. The Secretary of HEW must conduct proficiency testing in the Allied (Associated) Health Professions.

2. The resultant proficiency tests may become more important than either:

    a. "formal educational (requirements)" or
    b. "professional membership requirements."

3. Federal payment controls will recognize the proficiency testing mechanisms.

During one internal review meeting, this statement was postulated and a question asked, "If a proficiency test controls the quality of health care and the money-flow, hospital administrators are sure to hire on that basis. If that happens, where will that leave AMRA membership, registration and accreditation?"

It appears to be true that two separate testing mechanisms (with the Government and with AMRA) would cause problems. Then the next question should be: "Should AMRA combine the two mechanisms and accept the proficiency testing concept?"

In order to consider this question, it was necessary to obtain more data on other legal factors.

Effective date. (d) The amendments made by this section shall be effective January 1, 1973 (or earlier if the State plan so provides).

RELATIONSHIP BETWEEN MEDICAID AND COMPREHENSIVE HEALTH CARE PROGRAMS

42 USC 1396a. SEC. 240. Section 1902(a)(23) of the Social Security Act is amended by adding after the semicolon at the end thereof the following: "and a State plan shall not be deemed to be out of compliance with the requirements of this paragraph or paragraph (1) or (10) solely by reason of the fact that the State (or any political subdivision thereof) has entered into a contract with an organization which has agreed to provide care and services in addition to those offered under the State plan to individuals eligible for medical assistance who reside in the geographic area served by such organization and who elect to obtain such care and services from such organization;".

PROGRAM FOR DETERMINING QUALIFICATIONS FOR CERTAIN HEALTH CARE PERSONNEL

Ante, p. 1386. SEC. 241. Title XI of the Social Security Act is amended by adding after section 1122 (as added by section 221(a) of this Act) the following new section:

"PROGRAM FOR DETERMINING QUALIFICATIONS FOR CERTAIN HEALTH CARE PERSONNEL

42 USC 1395. "SEC. 1123. (a) The Secretary, in carrying out his functions relating to the qualifications for health care personnel under title XVIII, shall develop (in consultation with appropriate professional health organizations and State health and licensure agencies) and conduct (in conjunction with State health and licensure agencies) until December 31, 1977, a program designed to determine the proficiency of individuals (who do not otherwise meet the formal educational, professional membership, or other specific criteria established for determining the qualifications of practical nurses, therapists, laboratory technicians, and technologists, and cytotechnologists, X-ray technicians, psychiatric technicians, or other health care technicians and technologists) to perform the duties and functions of practical nurses, therapists, laboratory technicians, technologists, and cytotechnologists, X-ray technicians, psychiatric technicians, or other health care technicians and technologists. Such program shall include (but not be limited to) the employment of procedures for the formal testing of the proficiency of individuals. In the conduct of such program, no individual who otherwise meets the proficiency requirements for any health care specialty shall be denied a satisfactory proficiency rating solely because of his failure to meet formal educational or professional membership requirements.

"(b) If any individual has been determined, under the program established pursuant to subsection (a), to be qualified to perform the duties and functions of any health care specialty, no person or provider utilizing the services of such individual to perform such duties and functions shall be denied payment, under title XVIII or under 42 USC 1396; any State plan approved under title XIX, for any health care services provided by such person on the grounds that such individual is not qualified to perform such duties and functions."

CIVIL RIGHTS ACT OF 1964

In 1964, the Civil Rights Act became law in a move to guarantee everyone the "inalienable rights" which were stated in the Constitution. In this Act, minority groups were identified and provisions for protection mechanisms were established.

As a result of this initial legislation, Guidelines, Executive Orders, Amendments, numerous legal opinions and actions were initiated. The major ones include:

1. Guidelines on Employee Selection Procedures; published in the Federal Register, Volume 35, No. 149, August 1, 1970 (pages 12333-12336).
2. Executive Order No. 11,246.
3. Equal Employment Opportunity Act of 1972 (PL92-261).
4. Employment Discrimination and Title VII of the Civil Rights Act of 1964, Harvard Law Review, 71. Vol. 84:1109.
5. STRANGERS IN PARADISE: GRIGGS V. DUKE POWER CO. AND THE CONCEPT OF EMPLOYMENT DISCRIMINATION (Griggs v. Duke Power Co., 401 U.S. 424, 430 n. 6 (1971).

Also of note are cases like United States v. H. K. Porter Co., Dobbins v. Electrical Workers Local 212, Parham v. Southwestern Bell Telephone Co. and The United States v. Electrical Workers Local 38.

When reviewing these items, one must keep in mind that once a precedent has been established for a protected group (i.e. minority), the precedent can then be applied to other groups. If a practice (such as limited testing) is found to be discriminatory against a protected group and therefore illegal, it continues to be an illegal practice.

1. Guidelines on Employee Selection Procedures

This document, published in the Federal Register on August 1, 1970, superseded and enlarged on the testing procedure guidelines issued on August 24, 1966 by the Equal Employment Opportunity Commission.

To quote the Guidelines, paragraph 1607.1(b),

> **"It has also become clear that in many instances persons are using tests as a basis for employment decisions without evidence that they are valid indicators of employee job performance."**

The overall inference is that tests which do not measure or predict job performance are discriminatory and may, therefore, not be legal.

Further on in the reference (paragraph 1607.4(c)(1), the issue of "job progression structures" is approached.

In addition, the minimum legal requirements for test design and validation are stated.

2. Executive Order No. 11,246, 1970

This Order was made part of the Code of Federal Regulations (C.F.R. 402 - 1970).

When issued, it applied to "federally-assisted construction grants." It has also been applied to any person or organization receiving federal contracts or grants. It requires contractors", "...not to discriminate and to take affirmative action..."

It applies to all employers, including hospitals, receiving any type of federal grant or contract.

3. Equal Employment Opportunity Act of 1972 (PL92-261)

This Act expanded Title VII coverage of the law to include governments, agencies and political subdivisions, and establishes the mechanisms under which the Commission (EEOC) can act.

In analyzing the Act, "Objective Measure" may be the only defensible position one can take on employment opportunity.

4. ARTICLE: Employment Discrimination and Title VII of the Civil Rights Act of 1964.

This article, in the Harvard Law Review Volume 84:1109, reviews the status of actions and rulings resulting from the Civil Rights Act. This article contains 207 pages; therefore, a number of quotes have been extracted for analysis.

Page 1117:

"In addition, cases like United States vs. H. K. Porter Co. have approved, in principle, the Commissions interpretation that employment tests must be job related."

Page 1118:

"By interpreting the Act to require job relatedness (in testing), Title VII can be useful in helping to maximize the employment of human resources. In a sense Title VII can be seen as an attempt to perfect the (job) market at a pace faster than could be achieved by natural market forces."

Page 1154:

"The courts have indicated that the employeers have,...a duty of fair recruitment....."

Further, on page 1276, the Review reported an opinion on the government's strategy to eliminate discriminatory practices. To quote the Review:

> "A third strategy would be to focus upon regulated industries, applying pressure through the agencies charged with granting licenses..."

5. Strangers in Paradise: GRIGGS v. DUKE POWER CO. and the Concept of Employment Discrimination

This article, published in the Michigan Law Review (1972, Vol. 71:59), was written by Alfred W. Blumrosen, Professor of Law at Rutgers, Chief of Conciliations, U.S. Equal Employment Opportunity Commission, 1965 to 1967 and Consultant to the Departments of Labor, Justice and Housing and Urban Development.

He indicates that the conceptual-precedent is found in the Bible:

> Leviticus 24:22, "Ye shall have one manner of law, as well for the stranger as the homeborne."

Again, individual references are given.

Page 62:

> "Griggs redefines discrimination in terms of consequence rather than motive, effect rather than purpose. This definition is new to the field of employment discrimination..." "The Court applied this new definition to INVALIDATE HIRING STANDARDS BASED UPON EDUCATION AND TESTING..."

Page 79 (A quote from Chief Justice Burger):

"History is filled with examples of men and women who rendered highly effective performance without the conventional badges of accomplishment in terms of certificates, diplomas, or degrees. Diplomas and tests are useful servants, but Congress has mandated the common sense proposition that they are not to become masters of reality."

Page 84:

"The Court concluded, 'The ability of the individual effectively and efficiently to carry out his assigned duties is, therefore, the only justification recognized by the law.'"

Page 106:

"(The case of) Griggs does not demand that the work force...be a microcosm of the total population or labor force. Griggs only requires that the STRUCTURES RESPONSIBLE FOR RESTRICTING...OPPORTUNITY BE DESTROYED."

Page 109:

"Title VII permits employers (hospitals) to use (accept) ability tests.... ...the tests used (must) be structured in terms of the skills required on the specific jobs and that the tests (must) be validated for those specific jobs."

These Laws, Guidelines and Legal Judgements have not, as yet, to our knowledge, been applied to the medical record field or its practitioners. However, in the best judgment of the Project Staff, these items do apply to the medical records field in general and specifically to the professional levels, AMRA's tests, existing educational requirements and testing mechanisms.

ALLIED HEALTH PROFESSIONS TRAINING ACT OF 1966 (PL89-571 and PL91-519)

This legislation was established to promote education and training in the Allied Health Professions. It supported various grant categories which expanded and improved education activities at two and four-year institutions.

It is under this enabling legislation, that all the various requirements on proficiency testing, career mobility and equal employment opportunity were combined with (HRA) Health Resources Administration concerns on the quality of patient care. Apparently BHRD (Bureau of Health Resources Development) looks on these various factors as "mutually inclusive."

The position paper written by Maryland Y. Pennell (See Appendix A) and referred to in Section I, documents the BHRD/HRA position.

BHRD's objectives, also presented in Section I, pages I-2/3, state the Government's intent and position. These five Government objectives, as summarized by the Project Staff, are:

1. Promote national credentialing systems for allied health professions. (Includes Medical Records.)
2. Develop self-sustaining credentialing systems. (AMRA can manage and support.)
3. Develop methods which assure proficiency, other than educational achievements. (Competency-based proficiency examinations.)
4. Apply credentialing systems to the technician (ART) and technologist or therapist (administrator, RRA) levels.
5. Promote proficiency standards which will:
   a. Confer occupational credentialing.
   b. Establish educational objectives.
   c. Satisfy Federal manpower requirements (e.g., MEDICARE)

   (Note: items in parenthesis are the Project Staff interpretations)

SUMMARY

When these legislative and legal factors are considered simultaneously, it is apparent that a major reformation in "employee selection" and "testing mechanisms" has taken place. The medical record profession is now directly confronted by these changes.

STATE-LEVEL RESPONSES

The state-level response was excellent. There had been concern raised by the advisors and consultants about state-level organization involvement. The two major concerns were:

- The potential level of response (how many?)
- The utility and quality of acquired data. (How good is the information?)

47 state-level organizations responded. (45 states, Puerto Rico and Washington, D.C.).

A full report of Tasks 1 and 2 (which provided policy information) is included in the Appendix and summarized here. Tasks 3 and 4 are reported here.

TASK 1.

The purpose of Task 1 was to evaluate the acceptability of the structure and process involved in the feasibility research. The state-level response indicated a strong majority for AMRA involvement. There was an identifiable minority position against AMRA involvement which indicated strong concern about possible negative effects of proficiency testing.

TASK 2.

Task 2 was designed to investigate the issues in career mobility and to provide input on levels, title and actual career progression paths.

The state-level input did provide an excellent base on which to analyze the needs of the profession and to propose two career progression models.

As a result of the input two national models were synthesized and are presented in Section V.

TASK 3

Task 3 was designed to provide information to validate the classification scheme and identify overlap and excluded items.

Figure III-1 presents the summarized results from Task 3. It shows a high degree of acceptability for the skill-knowledge-affect grouping, but reported concern on completeness and accuracy. As a result of this input, the Project Staff compiled lists of state-proposed additions, deletions and revisions. Figure III-2 shows the knowledge items and Figure III-3 shows the skill items. As a result of the input, the groups and areas were reorganized and finalized as follows:

Skill and Knowledge = 19 elements

Affect = 3 possible methods

TASK 4

Task 4 was designed to improve the quality of the Bank of Behavioral Objectives and to investigate the feasibility of the three testing options.

Over 1,250 changes were made to the Bank. Objectives were added and the functional areas were expanded. The changes were analyzed along with frequency distributions of the initial code assignments. The pattern of changes was consistent and tended to support the validity of the performance items and taxonomy code assignments.

SMRA SUMMARY

TASK 3

REVIEW AND ANALYZE THE GROUPINGS OF SKILLS, KNOWLEDGES AND MOTIVATION REQUIREMENTS IN MEDICAL RECORD PRACTICE; REPORT ON THEIR APPROPRIATENESS, COMPLETENESS AND ACCURACY

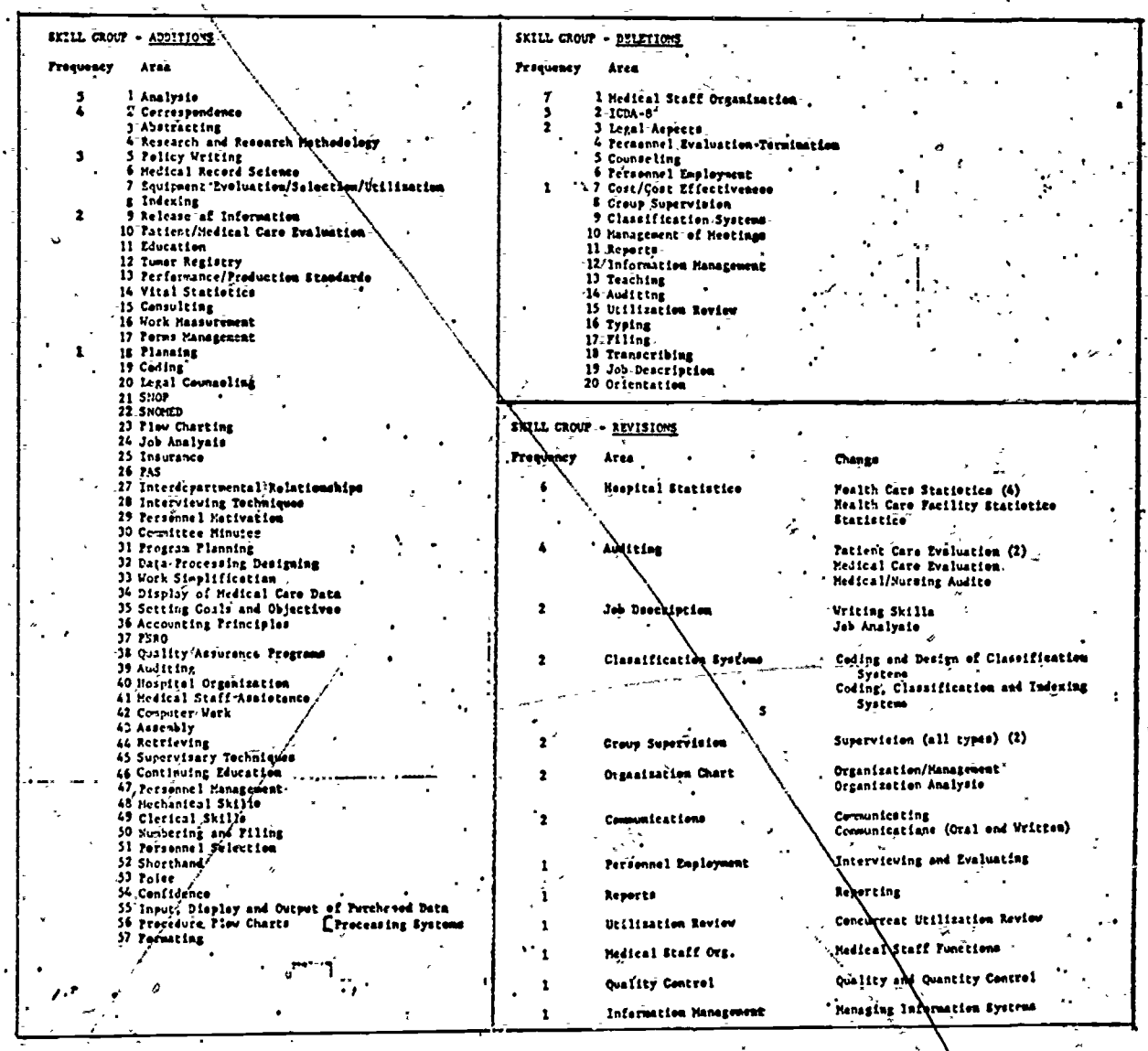
	Yes	No	No Response
SKILLS GROUP			
1. Acceptability of the APPROPRIATENESS of using a Skills group of functions	92%	2%	2%
2. Acceptability of the COMPLETENESS of the areas listed under the Skills group	52%	46%	2%
3. Acceptability of the ACCURACY of the areas listed under the Skills group	48%	46%	6%
KNOWLEDGES GROUP			
1. Acceptability of the APPROPRIATENESS of using a Knowledges group of functions	90%	6%	4%
2. Acceptability of the COMPLETENESS of the areas listed under the Knowledges group	31%	60%	8%
3. Acceptability of the ACCURACY of the areas listed under the Knowledges group	50%	40%	10%
AFFECT GROUP (MOTIVATION)			
1. Acceptability of the APPROPRIATENESS of using an Affect group of functions	83%	10%	6%
2. Acceptability of the COMPLETENESS of the areas listed under the Affect group	46%	48%	6%
3. Acceptability of the ACCURACY of the areas listed under the Affect group	54%	33%	13%

THE RELATIVE IMPORTANCE TO ACTUAL MEDICAL RECORD PRACTICE OF THE GROUPINGS OF SKILLS, KNOWLEDGES AND AFFECT (MOTIVATION) AS SHOWN ON THE CHART OF FUNCTIONAL AREAS

	Average	Range
SKILLS	32.8%	10-75%
KNOWLEDGES	40.2%	20-75%
AFFECT	26.4%	1-50%

12

Figure III-1. Task 3 Summary



SKILL GROUP - ADDITIONS

Frequency		Area
5	1	Analysis
4	2	Correspondence
	3	Abstracting
	4	Research and Research Methodology
3	5	Policy Writing
	6	Medical Record Science
	7	Equipment Evaluation/Selection/Utilization
	8	Indexing
2	9	Release of Information
	10	Patient/Medical Care Evaluation
	11	Education
	12	Tumor Registry
	13	Performance/Production Standards
	14	Vital Statistics
	15	Consulting
	16	Work Measurement
	17	Forms Management
1	18	Planning
	19	Coding
	20	Legal Counseling
	21	SNOP
	22	SNOMED
	23	Flow Charting
	24	Job Analysis
	25	Insurance
	26	PAS
	27	Interdepartmental Relationships
	28	Interviewing Techniques
	29	Personnel Motivation
	30	Committee Minutes
	31	Program Planning
	32	Data-Processing Designing
	33	Work Simplification
	34	Display of Medical Care Data
	35	Setting Goals and Objectives
	36	Accounting Principles
	37	PSRO
	38	Quality Assurance Programs
	39	Auditing
	40	Hospital Organization
	41	Medical Staff Assistance
	42	Computer Work
	43	Assembly
	44	Retrieving
	45	Supervisory Techniques
	46	Continuing Education
	47	Personnel Management
	48	Mechanical Skills
	49	Clerical Skills
	50	Numbering and Filing
	51	Personnel Selection
	52	Shorthand
	53	Police
	54	Confidence
	55	Input, Display and Output of Purchased Data Processing Systems
	56	Procedure Flow Charts
	57	Formating

SKILL GROUP - DELETIONS

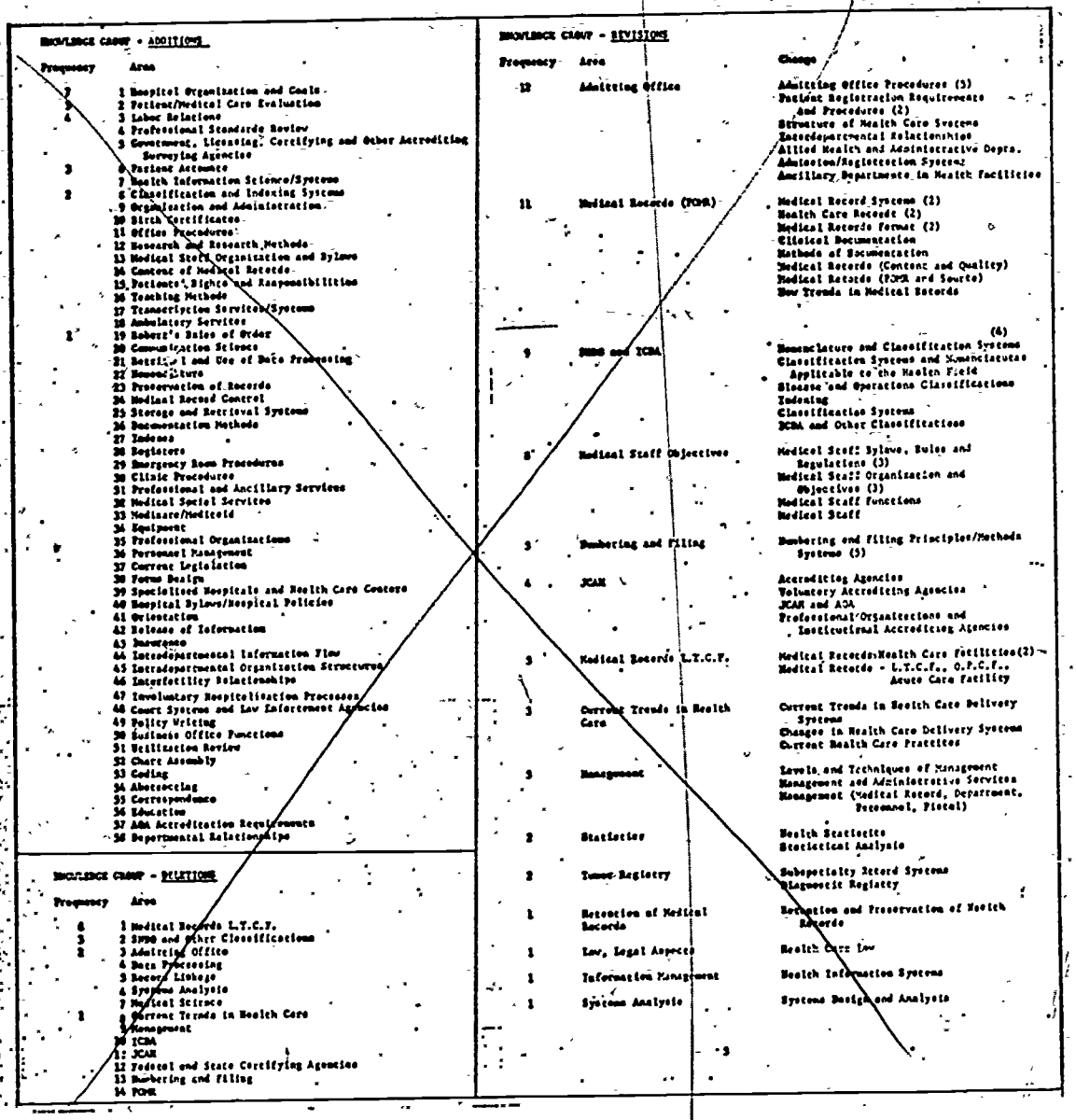
Frequency		Area
7	1	Medical Staff Organization
5	2	ICDA-8
2	3	Legal Aspects
	4	Personnel Evaluation-Termination
	5	Counseling
	6	Personnel Employment
1	7	Cost/Cost Effectiveness
	8	Group Supervision
	9	Classification Systems
	10	Management of Meetings
	11	Reports
	12	Information Management
	13	Teaching
	14	Auditing
	15	Utilization Review
	16	Typing
	17	Filing
	18	Transcribing
	19	Job Description
	20	Orientation

SKILL GROUP - REVISIONS

Frequency	Area	Change
6	Hospital Statistics	Health Care Statistics (4) Health Care Facility Statistics Statistics
4	Auditing	Patient Care Evaluation (2) Medical Care Evaluation Medical/Nursing Audits
2	Job Description	Writing Skills Job Analysis
2	Classification Systems	Coding and Design of Classification Systems Coding, Classification and Indexing Systems
2	Group Supervision	Supervision (all types) (2)
2	Organization Chart	Organization/Management Organization Analysis
2	Communications	Communicating Communications (Oral and Written)
1	Personnel Employment	Interviewing and Evaluating
1	Reports	Reporting
1	Utilization Review	Concurrent Utilization Review
1	Medical Staff Org.	Medical Staff Functions
1	Quality Control	Quality and Quantity Control
1	Information Management	Managing Information Systems

4U-A

Figure III-2. Changes to Knowledge Areas



KNOWLEDGE GROUP - ADDITIONS

Frequency	Area
7	1 Hospital Organization and Goals
5	2 Patient/Medical Care Evaluation
4	3 Labor Relations
	4 Professional Standards Review
	5 Government, Licensing, Certifying and Other Accrediting Surveying Agencies
3	6 Patient Accounts
	7 Health Information Science/Systems
2	8 Classification and Indexing Systems
	9 Organization and Administration
	10 Birth Certificates
	11 Office Procedures
	12 Research and Research Methods
	13 Medical Staff Organization and Bylaws
	14 Content of Medical Records
	15 Patients' Rights and Responsibilities
	16 Teaching Methods
	17 Transcription Services/Systems
	18 Ambulatory Services
1	19 Robert's Rules of Order
	20 Communication Science
	21 Retrieval and Use of Data Processing
	22 Nomenclature
	23 Preservation of Records
	24 Medical Record Control
	25 Storage and Retrieval Systems
	26 Documentation Methods
	27 Indexes
	28 Registers
	29 Emergency Room Procedures
	30 Clinic Procedures
	31 Professional and Ancillary Services
	32 Medical Social Services
	33 Medicare/Medicaid
	34 Equipment
	35 Professional Organizations
	36 Personnel Management
	37 Current Legislation
	38 Forms Design
	39 Specialized Hospitals and Health Care Centers
	40 Hospital Bylaws/Hospital Policies
	41 Orientation
	42 Release of Information
	43 Insurance
	44 Interdepartmental Information Flow
	45 Intradepartmental Organization Structures
	46 Interfacility Relationships
	47 Involuntary Hospitalization Processes
	48 Court Systems and Law Enforcement Agencies
	49 Policy Writing
	50 Business Office Functions
	51 Utilization Review
	52 Chart Assembly
	53 Coding
	54 Abstracting
	55 Correspondence
	56 Education
	57 ADA Accreditation Requirements
	58 Departmental Relationships

KNOWLEDGE GROUP - DELETIONS

Frequency	Area
6	1 Medical Records L.T.C.F.
3	2 SNOP and Other Classifications
2	3 Admitting Office
	4 Data Processing
	5 Record Linkage
	6 Systems Analysis
	7 Medical Science
1	8 Current Trends in Health Care
	9 Management
	10 ICDA
	11 JCAH
	12 Federal and State Certifying Agencies
	13 Numbering and Filing
	14 POMR

KNOWLEDGE GROUP - REVISIONS

Frequency	Area	Change
12	Admitting Office	Admitting Office Procedures (5) Patient Registration Requirements and Procedures (2) Structure of Health Care Systems Interdepartmental Relationships Allied Health and Administrative Depts. Admission/Registration Systems Ancillary Departments in Health Facilities
11	Medical Records (PCMR)	Medical Record Systems (2) Health Care Records (2) Medical Records Format (2) Clinical Documentation Methods of Documentation Medical Records (Content and Quality) Medical Records (PCMR and Source) New Trends in Medical Records
9	SNOP and ICDA	(4) Nomenclature and Classification Systems Classification Systems and Nomenclatures Applicable to the Health Field Disease and Operations Classifications Indexing Classification Systems ICDA and Other Classifications
8	Medical Staff Objectives	Medical Staff Bylaws, Rules and Regulations (3) Medical Staff Organization and Objectives (3) Medical Staff Functions Medical Staff
5	Numbering and Filing	Numbering and Filing Principles/Methods Systems (5)
4	JCAH	Accrediting Agencies Voluntary Accrediting Agencies JCAH and AOA Professional Organizations and Institutional Accrediting Agencies
3	Medical Records L.T.C.F.	Medical Records-Health Care Facilities(2) Medical Records - L.T.C.F., O.P.C.F., Acute Care Facility
3	Current Trends in Health Care	Current Trends in Health Care Delivery Systems Changes in Health Care Delivery Systems Current Health Care Practices
3	Management	Levels and Techniques of Management Management and Administrative Services Management (Medical Record, Department, Personnel, Fiscal)
2	Statistics	Health Statistics Statistical Analysis
2	Tumor Registry	Subspecialty Record Systems Diagnostic Registry
1	Retention of Medical Records	Retention and Preservation of Health Records
1	Law, Legal Aspects	Health Care Law
1	Information Management	Health Information Systems
1	Systems Analysis	Systems Design and Analysis

Figure III-3. Changes to Skill Areas

On affect; one state provided analysis of the areas of affect. "Ethical Considerations", based on AMRA's Code of Ethics, was recommended and affective taxonomatic codes were assigned to the various roles.

PROFILES

A profile is a frequency distribution chart or a table which displays a weighted-composite of various items. The Project used profiles to display various groups perceptions on the importance and relative weighting of:

- Roles in medical record practice (for the MRA/MRT).
- Functional Elements (for the MRA and MRT)

* NOTE *

Early in the Project it was decided to analyze roles separate from functions.

- Proficiency-Testing Options available to AMRA.

Profiles were produced using a modified KAPPEN Q-Sort method. Two separate groups, representing medical record practitioners (10 Work Group members) and service users (29 Advisory Council members), performed the sorts.

ROLE PROFILES

For analysis purposes, occupational titles (MRA and MRT) were not considered to be one role but a composite of various roles.

The roles investigated included:

- Consultation Role
- Administrative Role
- Supervisory Role
- Technical Role
- Transcribing Role
- Clerical Role

The two role profiles, which were produced separately at different times, are shown in Figure III-4. Items of interest include:

1. The similarity of "forms" and weights assigned to the MRA (and MRT) by the two diverse groups.

2. The differences between the MRA and MRT profiles.

FUNCTIONAL ELEMENT PROFILES

For analysis purposes, the medical record field was divided into 19 functional elements, which are:

I Admitting Functions

XVI Anatomy & Physiology

IV Classification & Indexing Systems

II Current Trends in Health Care Delivery

VIII Health Care Records; Content, Format and Documentation of

III Health Information Systems

XII Health Statistics, Collecting and Display

X Information Storage and Retrieval

VI Legal Aspects

V Licensing, Certifying and Accrediting Agencies

VII Management, Principles and Functions of

XVIII Medical Science

IX Medical Staff, Organization and Functions

XVII Medical Terminology

XIX Other - Miscellaneous

XI Personnel Administration

XIII Quality Assurance Systems

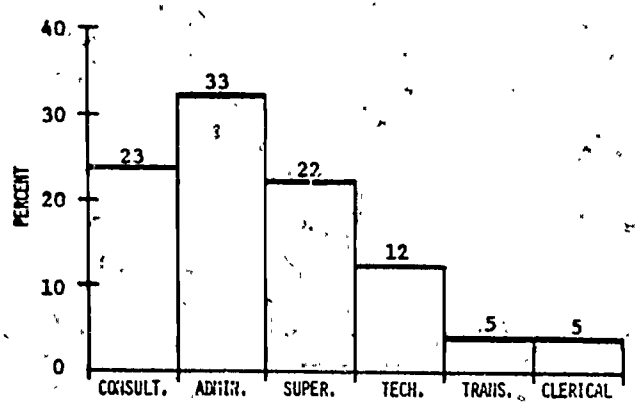
XIV Transcription

XV Typing

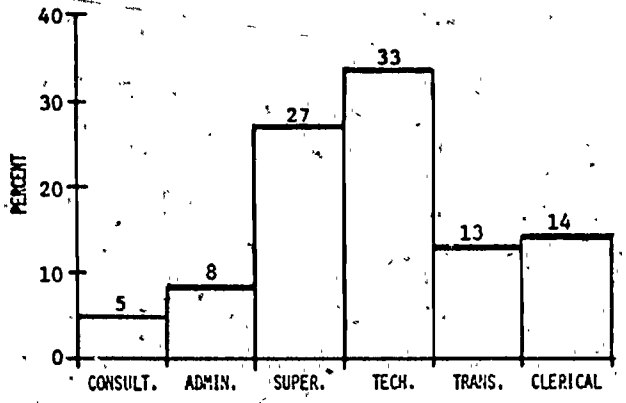
The functional element profiles are shown in Figures III-5 and 6. Again note the similarity of group responses and differences between MRA and MRT.

OPTION PROFILES

The two groups, after discussing the options (see Table III-1) and considering the possible importance of each, performed a Q-Sort. It should be reported that the initial reaction to all the options appeared to be negative. However, after much discussion, it was finally agreed that

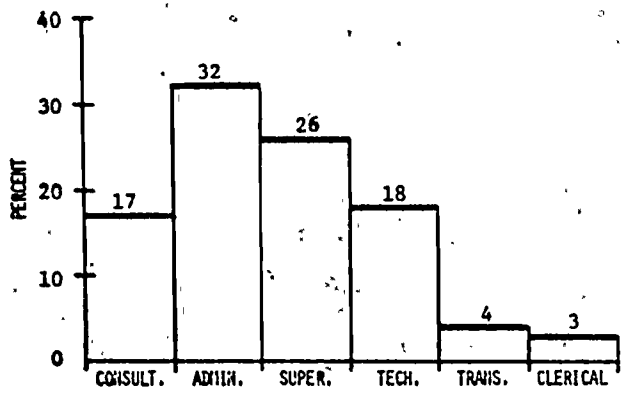


(1) MRA

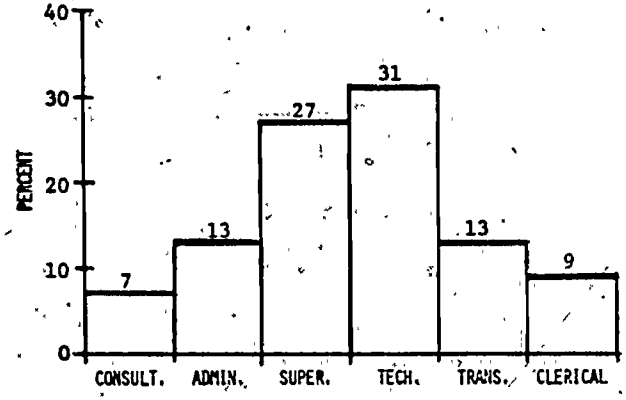


(2) MRT

(a) Work Group Response



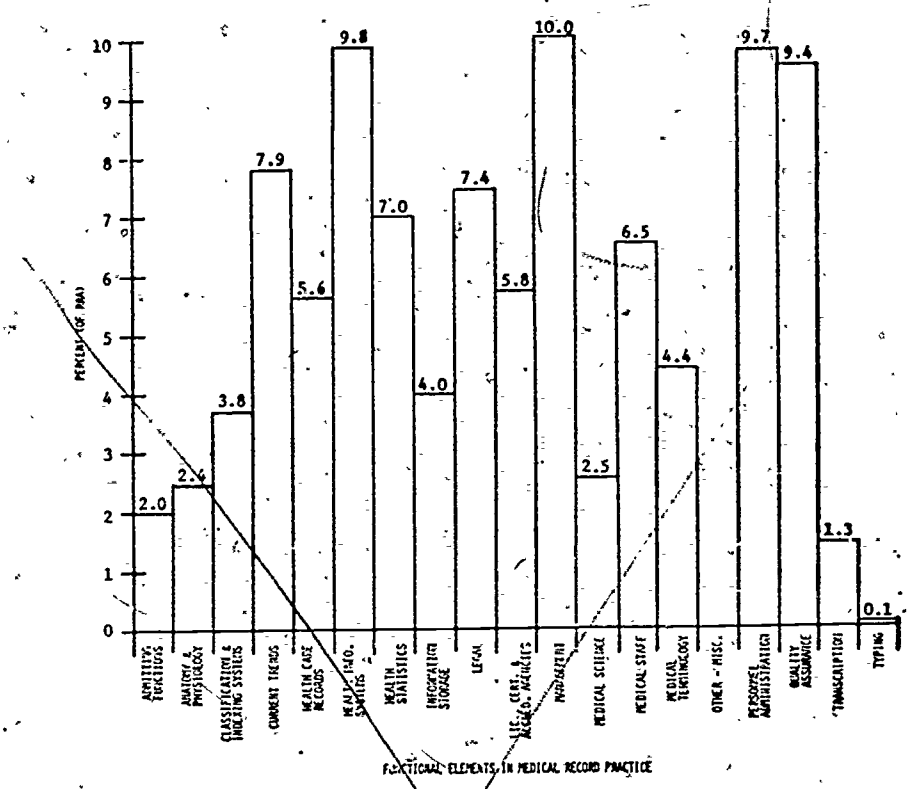
(1) MRA



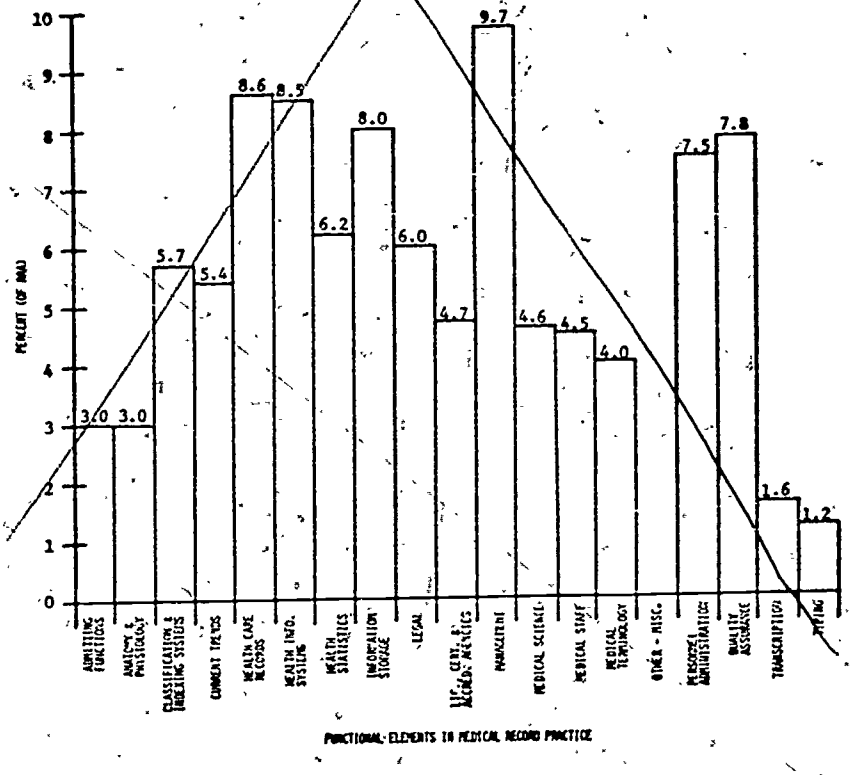
(2) MRT

(b) Advisory Council Response

Figure III-4. MRA/MRT Role Profiles



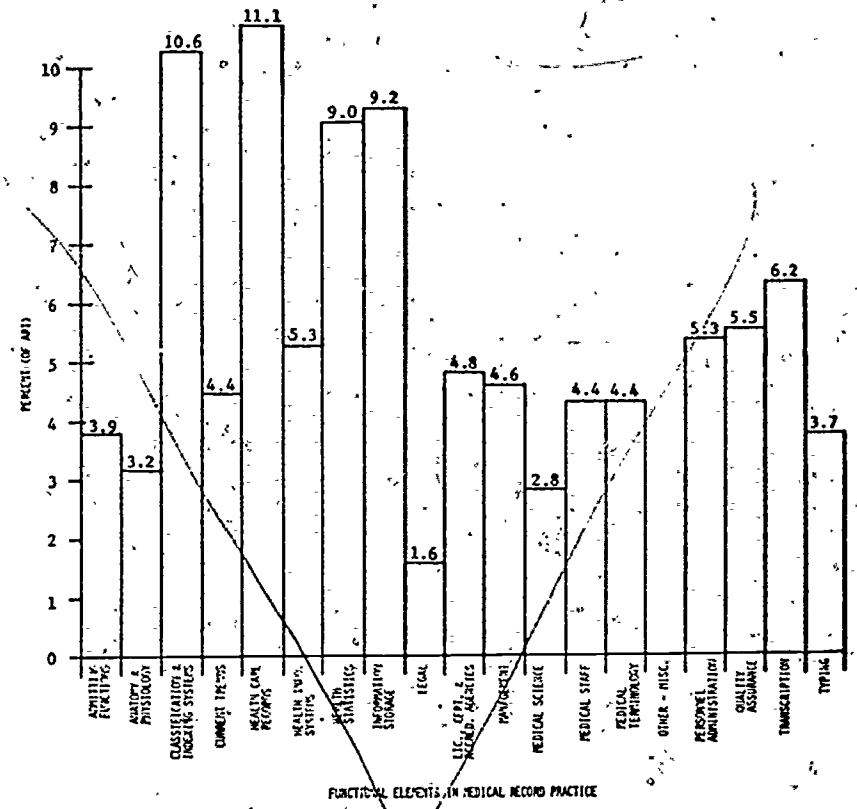
(a) Work Group Results



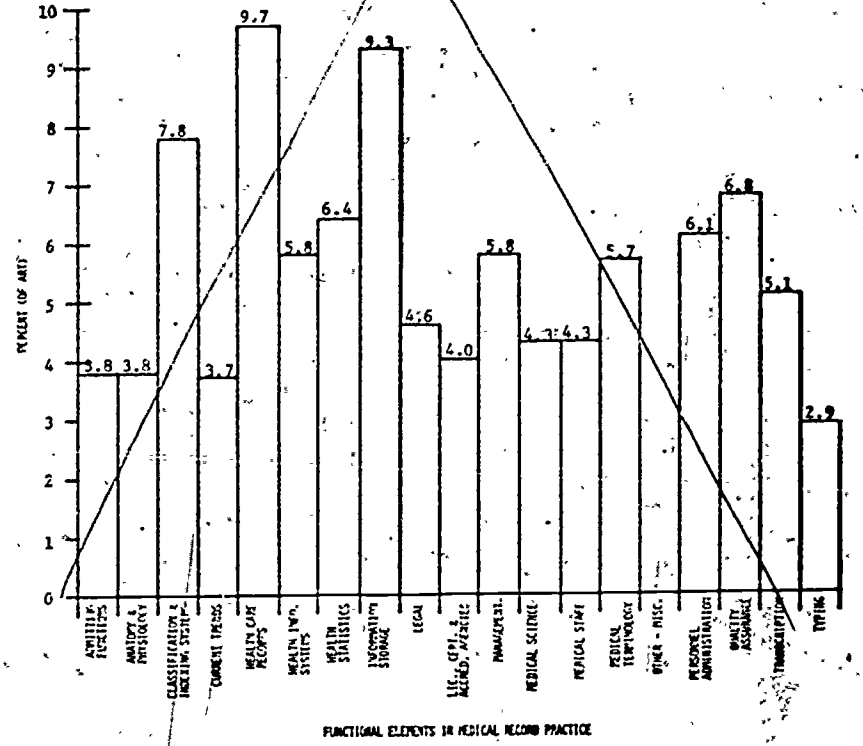
(b) Advisory Council Results

Figure III-5. MRA Functional Profiles

43-A



(a) Work Group Results



(b) Advisory Council Results

Figure III-6. MRT Functional Profiles

AMRAS OPTIONS	LEGISLATIVE IMPACT			COMMENTS
	SSA (PL92-603)	AHPPTA (PL89-751)	EEOA (PL92-261)	
I. ACQUIESCENCE/APPROVAL 1. Turn control over to BHRD. 2. Turn data over to BHRD. 3. Accept the resultant test. 4. Accept successful completors.	Full Compliance	Full Compliance	Full Protection of Existing Levels	AMRA might lose leadership of field. Hospital administrators, who need certified people in order to receive Medicare payments, may prefer non-AMRA employees who have met government certification requirements.
II. ACTIVE APPROVAL (Option A) 1. Test design & field testing. 2. Establish go/no-go criteria for final tests. 3. Adopt tests for RRA/ART (if acceptable)	Full Compliance	Full Compliance	Full Protection of Existing Levels	This option would place AMRA in a "wait-and-see" position, to see whether an adequate competency-based test was designed, validated and field-tested. A final decision on go/no-go would be delayed for two years and would be based on whether the resultant test actually measures administrator and technician level competence.
(Option B) Select All Roles for Test Development 1. Coordinate with test developer. 2. Establish evaluation criteria. 3. Review field test results. 4. Select level for testing. 5. Adopt tests for selected levels.	Full Compliance if RRA/ART Tests are Adopted.	Full Compliance	Full Protection of Existing Levels	
III. PARTIAL COMPLIANCE (Option A) 1. Technical level test (and) 2. Transcription level test	Possible Compliance	Partial Compliance with BHRD Objectives	No Protection for Existing RRA Tests	Strong Points: 1. Would improve career mobility at lower levels. 2. Would guarantee adequacy of patient information, supporting the quality of patient care. Weak Points: 1. If rejected by BHRD, it is the same as a refusal to comply with the law. 2. If RRA or ART test is challenged as being discriminatory (i.e., not competency-based), the requirement could be set aside as a hiring standard.
(Option B) 1. Transcription test (and) 2. Other technical "tasks" tests: a. Coding b. Abstracting c. Statistical Reporting d. Analyzing	Possible Compliance (very weak)	Non-Compliance	No Protection for Existing RRA and ART Tests	
IV. REJECTION OF CONCEPT Refusal to consider proficiency testing at any level.	Non-Compliance	Non-Compliance	Non-Compliance No Protection	If this position is taken, BHRD must comply with the law (PL92-603) and have some testing service manage preparation and field-test of medical record tests. Then a separate certifying authority would be established.

TABLE III-1. AMRA's Options

the six options did, in fact, report the range of possibilities. The results of the Q-Sorts are shown in Figure III-7.

PROFICIENCY-TESTING MECHANISMS

The Project investigated various mechanisms for management and utilization of proficiency tests. Of specific interest were:

- Recommendations Developed By AOTA (American Occupational Therapy Association.
- Perceptions of AMRA Roles and Functions Work Groups.
- Perceptions of AMRA Roles and Functions Advisory Council.

RECOMMENDATIONS DEVELOPED BY AOTA

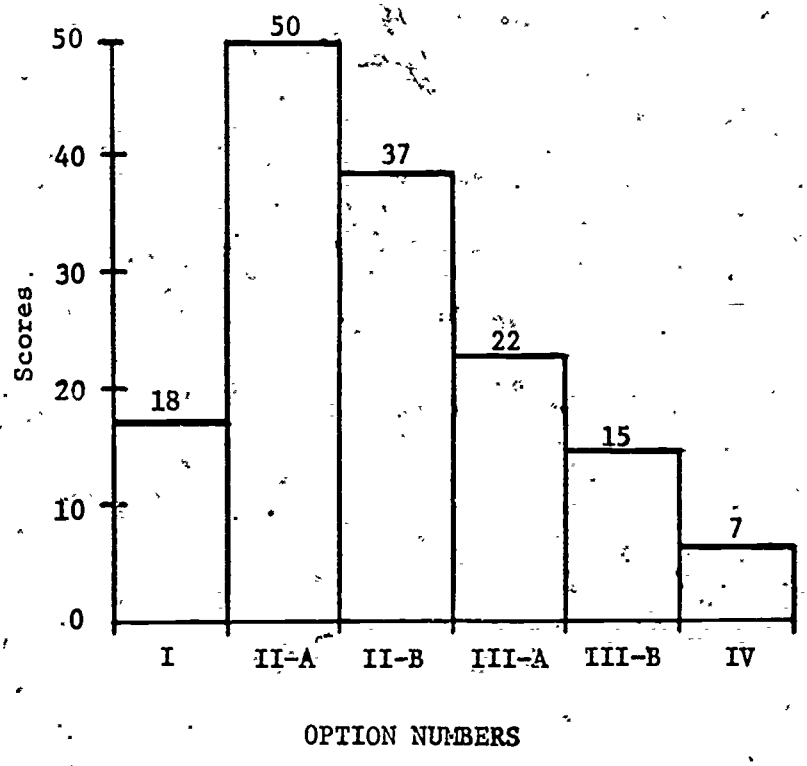
AOTA (American Occupational Therapy Association) developed 11 recommendations on proficiency testing and proficiency testing mechanisms. A reprint of AOTA's newsletter containing the recommendations is included in Figure III-8. The recommendations which warrant examination, include:

1. Examination Construction, Revision, and Utilization.
2. Board of Examiners.
3. Eligibility to Sit for the Examinations.
4. Credentialing Policies and Procedures.
5. Implementation of Recommendations.

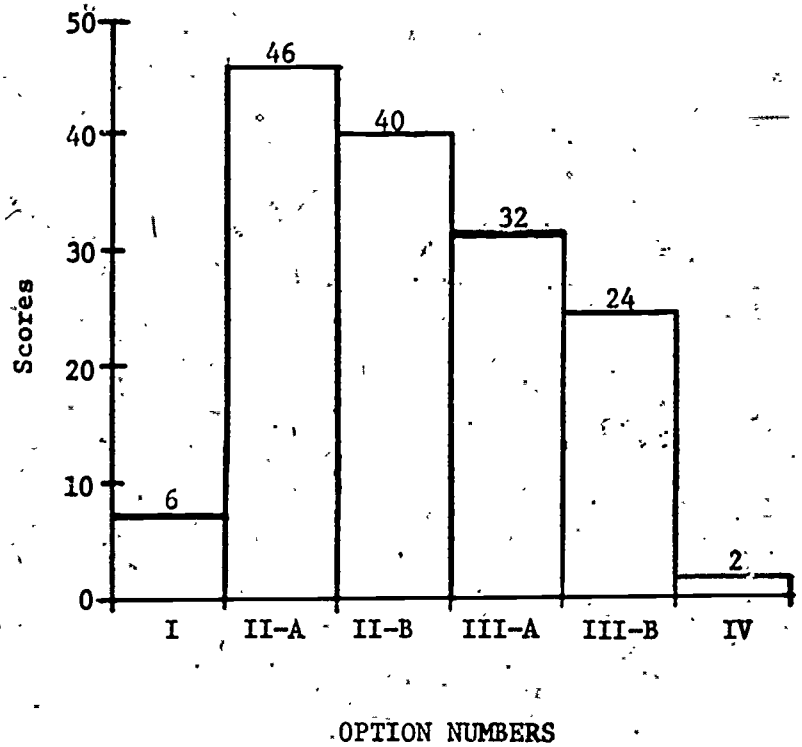
In a review of the "Eligibility..." and Credentialing Policies..." recommendations, it was clear that the AMRA concerns and the AOTA concerns were much the same.

WORK GROUP PERCEPTIONS

During Work Group meetings, the question of eligibility requirements was always discussed. The real concern involved protecting the profession. By protecting the profession, they meant that they did not want AMRA to "recognize", in any way any unqualified person and, therefore, allow



(a) Work Group Results



(b) Advisory Council Results

Figure III-7. Option Profiles

Field Testing Of Proficiency Examinations For Entry Level OTs Is Completed By PES; Final Report Available

The A Project Staff and re. arc Jned on the HEW co tract, the "Project to Delineate the Roles and Functions of Occupational Therapy Personnel," formulated recommendations regarding policies and procedures for using the proficiency examinations to credential entry-level occupational therapy personnel. Their recommendations are as follows:

Examination Construction, Revision, and Utilization

1. In order to maintain the basic standards of competency and quality of care in the occupational therapy field, the Project Staff recommends that representatives of the American Occupational Therapy Association:
   a. be consulted and participate in the writing, selection, and weighting of all examination questions
   b. assist in the norming and in the determination of the validity and reliability of the examinations
   c. assist in the determination of cut-off scores
   d. assist in the development of all regulation governing the administration of the examination and related credentialing policies and procedures

2. In addition, the Project Staff recommends that:
   a. all test items be subject to continuing evaluation and revision and that
   b. representatives of the American Occupational Therapy Association participate in this process

3. The Project Staff recognizes AOTA's and HEW's commitment to quality health care and shares with them a determination to ensure such care. Therefore, in order to sustain this commitment, we recommend that AOTA and HEW, individually and collectively, actively oppose any efforts by any organization, agency, and facility to lower the professional association's (AOTA) standards of practice. The Project Staff recommends that any agency or organization that uses the examinations be required to observe all administrative regulations and credentialing policies and procedures established pursuant to recommendation 1.d above.

Board of Examiners

4. The Project Staff recommends that a Board of Examiners, including registered occupational therapists and certified occupational therapy assistants selected from a list of candidates prepared by the American Occupational Therapy Association, be established to:
   a. determine whether or not persons wishing to sit for the proficiency examinations meet such eligibility criteria as may be established, and
   b. make specific rules and regulations governing the administration of the examinations and the use of the results thereof, and
   c. determine whether applicants have successfully fulfilled the six-month work evaluation requirements described in recommendation number 9.

Eligibility to Sit for the Examinations

5. The Project Staff recommends that in order to be eligible to sit for the level II (assistant) examination, an individual must:
   a. have at least one year of satisfactory work experience delivering direct client services in the fields of health or human welfare

6. The Project Staff recommends that in order to be eligible to sit for the level IV (therapist) examination, an individual must:
   a. have at least one year of formal educational preparation beyond high school or its equivalent; and a minimum of two years of satisfactory work experience in the delivery of direct client services in the fields of health or human welfare; or
   b. be a certified occupational therapy assistant with a minimum of two years of satisfactory work experience as a certified occupational therapy assistant;
   c. be credentialed as level II occupational therapy assistant with a minimum of two years of satisfactory work experience as a level II occupational therapy assistant

7. In addition, Project Staff recommends that an eligible individual may sit for the examination as many times as a different form of the examination is available, a different form being defined as one in which at least 60% of the items are different.

8. The Project Staff also recommends that:
   a. the entry level proficiency examinations for occupational therapy personnel be evaluated to determine their validity and reliability as a measure and predictor of entry-level job competency; and
   b. if the entry-level proficiency examinations for occupational therapy personnel are determined to be an adequate measure and predictor of entry-level competency, that the AOTA re-evaluate the eligibility criteria and make appropriate changes.

Credentialing Policies and Procedures

9. In light of AOTA's stated position that "the profession views proficiency examinations as tools for recognition/entry acceptable only when accompanied by adequate amounts of relevant experience, which the profession itself would judge," the Project Staff recommends that:
   a. if the AOTA decides that the proficiency examinations for occupational therapy personnel adequately measure and predict entry-level competency, that the Association endorse the use of these examinations as acceptable mechanisms for assessing an individual's ability to provide occupational therapy services when used in conjunction with carefully designed and supervised occupational therapy work experiences of at least six consecutive months duration at the level for which the credential is being sought; and that
   b. the work experience be conducted under the direct personal supervision of an occupational therapist registered, recognized by the AOTA as a qualified clinical supervisor; and that
   c. the entry-level individual satisfactorily complete this supervised occupational therapy work experience, and be evaluated on the AOTA student evaluation form, and the determination of satisfactory completion of this six-month work experience be in accordance with the established AOTA policies and procedures; and that
   d. the individual's previous work experiences be considered as fulfillment of the six-month work experience requirement as long as the above criteria 9a., 9b. and 9c. are satisfactorily met; and
   e. if the individual satisfactorily passes the level II examination and work experience evaluation, he be credentialed by AOTA as a certified occupational therapy assistant; and that
   f. if the individual satisfactorily passes the level IV occupational therapy examination and work experience evaluation, he be credentialed by AOTA as an occupational therapist, registered.

10. In addition, the Project Staff recommends that:
    a. the AOTA determine if the entry-level IV proficiency examination would provide an acceptable substitute to the current AOTA certification examination.

Implementation of Recommendations

11. In conclusion, the Project Staff recommends that all of the above recommendations be implemented on a pilot basis and that the American Occupational Therapy Association make such changes as may be needed to accommodate findings and conclusions derived from these experiments.

The final determination of the eligibility criteria, and other policies and procedures will be the subject of further discussion with the federal government, the AOTA, and the Proficiency Testing Advisory Committee.

For more information, contact the Practice, Education and Research Division, AOTA National Office.

Figure III-8. AOTA Recommendations (Reprint)

unqualified persons to practice medical record science.

While the Work Group members realized that a tested competency-based, job-related proficiency examination would "de-select" unqualified persons, additional guarantees appeared desirable. The following eligibility requirements were discussed; however, no scheme was ever approved:

RRA PROFICIENCY - TEST PREREQUISITES.

1. BS/BA from Accreditated School (or)
2. Any BS/BA with 5 years as ART (or)
3. 10 years as ART with 5 years of documented MRA responsibility.

ART PROFICIENCY - TEST PREREQUISITES.

1. AA from Accreditated School (or)
2. Correspondence School (MRP) Graduate (or)
3. High School or GED plus 5 years of documented experience as MRT.

ADVISORY COUNCIL PERCEPTIONS

Prerequisites to be eligible to sit for an examination were discussed during the second Advisory Council meeting. During the third and final meeting, the advisors in a group-workshop setting, formulated their recommendations. Table III-2 presents a summary of their various perceptions.

Note that all the advisory workshop-groups indicated (as did the Work-Groups) that entry to the RRA should be either through the ART or by formal education.

TABLE III-2

Advisory Council Perceptions on Proficiency Test Prerequisites

GROUP	RRA	ART
I	ART plus any BA (or) ART plus Two-Years Documented Experience as Supervisor (or) BA plus One-Year Documented Experience.	One-Year Documented Experience.
II	ART plus Two-Years Documented Experience in All Roles through Supervisor.	High School plus Two-Years Documented Experience Involving All Technical Tasks.
III	ART plus Two-Years Experience (or) ART plus Specified* College Work * Advisors did not specify	High School plus Two-Years Experience
IV	ART plus Any BA plus One-Year Experience (or) ART plus AA plus 30 hours plus Two-Years Experience (or) ART (correspondence) plus 90 hours plus Two-Years Experience.	NO RECOMMENDATION FORMULATED

DISCUSSION OF END PRODUCTS

The six final documents produced are:

1. Guidebook: A Guide to Curriculum Management.
2. A Re-Survey: 18 Years of Change: Functional Changes in Medical Record Practice.
3. Report: A Comparative Analysis of Selected MRT and MRA Educational Programs.
4. Resource: A Bank of Behavioral Objectives on Medical Record Practice.
5. Paper: Outcomes of Research Performed in Affect for Medical Record Practice.
6. Final Report: Final Report - A Study to Delineate Roles and Functions of Medical Record Personnel.

A GUIDE TO CURRICULUM MANAGEMENT.

The Project produced a preliminary Curriculum Management Guide to:

1. Meet the contractual requirement for Item B.6 in the Scope of Work.
2. Provide Medical Record School Directors and faculty with a useful school management resource.

The Guide is not intended to become a "formal-requirement" type document.

It is to be a "Guide!" It does not replace the Essentials or any other AMRA requirement.

The Guide is divided into five sections, as follows:

Section I - Introduction
Section II - Philosophy and Intent of Curriculum
Section III - Curriculum Management Design
Section IV - Alternative Educational Models
Section V - Summary

Section III is the largest, containing materials, checklists and

recommendations on four phases of school/curriculum management, which are:

- Assessment
- Planning
- Implementation
- Evaluation

It is hoped the Guide will become a dynamic document, with the field providing input for regular updating.

The Guide has not, as of June 30, 1975, been validated. The Project Staff recommends a field-review effort before national dissemination.

A RESURVEY: 18 YEARS OF CHANGE 1957-1975: Functional Changes in Medical Record.

The Project performed a limited task analysis and produced a report to:

1. Identify and document major changes in practice since 1957.
2. Document "actual roles and functions of personnel" as required by Contract Item B.2 of the Scope of Work.

The re-survey, sometimes called "Pittsburgh Revisited", was prepared by the original researchers, Olive G. Johnson, RRA and Bertha Pfenninger, RRA. They were assisted by Fredric A. Clark and Elizabeth Wessol, RRA.

The report contains five sections as follows:

Section I - Introduction
Section II - Methodology
Section III - Findings
Section IV - Summary
Section V - Recommendations

Section III reports the functions performed at hospitals, free-standing ambulatory care facilities and skilled nursing facilities. It also reports six major roles (hats) which exist in medical record practice.

TASK BANK: BEHAVIORAL OBJECTIVES FOR MEDICAL RECORDS

Skills and Knowledge

Over 4,000 behavioral objectives (task descriptions) were prepared in 19 elements for six occupational levels (or roles). The 19 elements which cover the knowledge base and the required skills, are:

I	Admitting Functions	X	Information Storage & Retrieval
II	Current Trends in Health Care Delivery	XI	Personnel Administration
III	Health Information Systems	XII	Health Statistics, Collection and Display
IV	Classification and Indexing Systems	XIII	Quality Assurance Systems
V	Licensing, Certifying and Accrediting Agencies	XIV	Transcription
VI	Legal Aspects	XV	Typing
VII	Management, Principles and Functions of	XVI	Anatomy and Physiology
VIII	Health Care Records; Content, Format, and Documentation of	XVII	Medical Terminology
IX	Medical Staff, Organization and Functions	XVIII	Medical Science
		XIX	Other - Miscellaneous

The six occupational levels or roles are the:

1. Consulting Role
2. Administrative Role
3. Supervisory Role
4. Technical Role
5. Transcribing Role
6. Clerical Role

A level-of-performance measure is given for each defined PERFORMANCE for each applicable occupational role. The level-of-performance measure used for knowledges and skills is a 1-6 scale. Over 20,000 codes were assigned.

This 1-6 level-of-performance scale is from Bloom's Taxonomy of Educational Objectives, Handbook I. The scale is a developmental hierarchy containing:

Level 1.xx = Knowledge
Level 2.xx = Comprehension
Level 3.xx = Application
Level 4.xx = Analysis
Level 5.xx = Synthesis
Level 6.xx = Evaluation

Affect

Affect items have been prepared using an ethical base similar to AMRA's Code of Ethics. Again a level-of-performance measure is given to each affect item. Taxonomy of Educational Objectives, Handbook II, was used.

SUMMARY

The resultant "Bank", along with a rated profile of a professional level, provide an adequate base on which to develop:

1. Competency-Based Proficiency Tests
2. Educational Curricula
3. Test Items for Educational Use

OUTCOMES OF RESEARCH PERFORMED IN AFFECT FOR MEDICAL RECORD PRACTICE

This paper reports the conclusions of the review performed by the Indiana State Medical Record Association. They reviewed the bases developed by the Work Group on affect.

Three bases were investigated by the Work Group on affect. These three were:

1. Role Perception - construction of an affect profile for each level of medical record practitioner.

2. Ethical Considerations - constructed to measure the degree to which ethical-affective elements are present in an individual. The ethical-affective elements were drawn from the AMRA Code of Ethics.

3. Professional Relationships - constructed to measure specific approach behaviors through use of "Key Words." For example, relationships with physicians are important.

FINAL REPORT

This document is the Final Report.

SECTION IV
CONCLUSIONS

GENERAL

This section restates the findings of the study. It is organized into eight parts:

- Proficiency Testing
- Feasibility of Obtaining Adequate Examinations
- Roles and Functions
- Levels and Titles
- Career Mobility
- State-Level Responses
- Educational Areas
- Research and Development in Medical Records

Many of these conclusions may conflict with current positions held. However, the Project Staff, basing these conclusions on hard factual data, felt a responsibility to report them as simply and directly as possible. An effort was made to state each conclusion individually, even though there are interrelationships between conclusions.

PROFICIENCY TESTING

CONCLUSION #1

The field and the individual professions AMRA represents are affected by the current legislation on:

a. Mobility & Training (PL89-751 and PL91-519)
b. Equal Employment Opportunity (PL92-261)
c. Proficiency Testing (PL92-603) and its possible future implications

CONCLUSION #2

Competency-based proficiency tests will be prepared for the Allied (Associated) Health Professions. PL92-603, Section 1123 made proficiency tests a legal requirement, relating to federal reimbursement. At the present time, the "reimbursement" portion of Section 1123 does not apply to medical records.

CONCLUSION #3

Based on the finding that 23% of the Directors of Medical Record Services in U.S. Hospitals* are NOT RRAs or ARTs indicates a need for additional personnel.

CONCLUSION #4

AMRA has six basic options in regard to proficiency testing. These alternatives are shown in Table IV-1 with references to the various laws.

The first and last options would result in basically the same outcome: Loss of Leadership in the Medical Record Field to Federal Control. The "Partial Compliance" options, IIIa and IIIb, do not appear to meet the intent of the letter or spirit of the laws. The two options, IIa and IIb, appear to be the most viable, in terms of compliance with existing laws.

* Based on results of a Quality Methodology Study, conducted by AMRA, consisting of a national sample of AHA member community short-term hospitals.

TABLE IV-1. AMRA's Action Alternatives to Proficiency Testing

AMRAS OPTIONS	LEGISLATIVE IMPACT			COMMENTS
	SSA (PL92-603)	AHPPTA (PL89-751)	EEOA (PL92-261)	
I. ACQUIESCENCE/APPROVAL 1. Turn control over to BHRD. 2. Turn data over to BHRD. 3. Accept the resultant test. 4. Accept successful completors.	Full Compliance	Full Compliance	Full Protection of Existing Levels	AMRA might lose leadership of field. Hospital administrators, who need certified people in order to receive Medicare payments, may prefer non-AMRA employees who have met government certification requirements.
II. ACTIVE APPROVAL (Option A) 1. Test design & field testing. 2. Establish go/no-go criteria for final tests. 3. Adopt tests for RRA/ART (if acceptable)	Full Compliance	Full Compliance	Full Protection of Existing Levels	This option would place AMRA in a "wait-and-see" position, to see whether an adequate competency-based test was designed, validated and field-tested. A final decision on go/no-go would be delayed for two years and would be based on whether the resultant test actually measures administrator and technician level competence.
(Option B) Select All Roles for Test Development 1. Coordinate with test developer. 2. Establish evaluation criteria. 3. Review field test results. 4. Select level for testing. 5. Adopt tests for selected levels.	Full Compliance if RRA/ART Tests are Adopted.	Full Compliance	Full Protection of Existing Levels	
III. PARTIAL COMPLIANCE (Option A) 1. Technical level test (and) 2. Transcription level test	Possible Compliance	Partial Compliance with BHRD Objectives	No Protection for Existing RRA Tests	Strong Points: 1. Would improve career mobility at lower levels. 2. Would guarantee adequacy of patient information, supporting the quality of patient care. Weak Points: 1. If rejected by BHRD, it is the same as a refusal to comply with the law. 2. If RRA or ART test is challenged as being discriminatory (i.e., not competency-based), the requirement could be set aside as a hiring standard.
(Option B) 1. Transcription test (and) 2. Other technical "tasks" tests: a. Coding b. Abstracting c. Statistical Reporting d. Analyzing	Possible Compliance (very weak)	Non-Compliance	No Protection for Existing RRA and ART Tests	
IV. REJECTION OF CONCEPT Refusal to consider proficiency testing at any level.	Non-Compliance	Non-Compliance	Non-Compliance No Protection	If this position is taken, BHRD must comply with the law (PL92-603) and have some testing service manage preparation and field-test of medical record tests. Then a separate certifying authority would be established.

CONCLUSION #5

The Government, apparently, does not want direct control or the continuing responsibility of administering proficiency examinations.

AMRA, if it so chooses, can manage and administer the resultant examinations and testing mechanisms.

CONCLUSION #6

Many medical record practitioners were not aware of current legislation and legal actions and their implications on the existing medical record professional structure.

FEASIBILITY OF OBTAINING ADEQUATE EXAMINATIONS

The Project Staff and the consultants concludes that an adequate base for development of proficiency tests for medical record practice now exists.

However, the mere existence of an adequate developmental base does not guarantee an acceptable examination. The Project Staff is aware that a competency-based examination can be generated by a professional testing service but is concerned whether an acceptable examination will be generated.

Also, the Project Staff has some reservation as to whether test items can be written for the higher levels of performances required of a RRA. Several nationally-known test specialists have been contacted and asked to judge whether job-specific,

task-oriented test items can be written for tasks involving synthesis, evaluation or judgment. They all declined the opportunity to prepare a statement one way or the other.

To illustrate the problem:

1. It is easy to test recall for coding
2. It is easy to test application of coding skills
3. It may be difficult to test for job-specific skills involving the evaluation, restructuring or installation of a coding system.

The Project has provided specific measures (using Bloom's Educational Taxonomy) of the level of performance required for various occupational levels in medical records. If the resultant test questions actually measure these performance levels, the test should be acceptable.

A test development model is presented in Section V. Specific action recommendations to guarantee the adequacy of any resultant examinations are documented in Section VI.

ROLES AND FUNCTIONS

For analysis purposes, the involved staff and Work Group members found it necessary to study "roles" apart from "functions." Role means "a character assumed" or "an expected behavior determined by status." Function means "a group of actions" or "actions to be performed."

CONCLUSION #1

There are identifiable roles in medical record practice and they can be classified. These "roles" can be considered as the various "hats" medical record personnel wear.

CONCLUSION #2

One classification scheme for roles found acceptable and usable contains:

a. A Consulting Role
b. An Administrative Role
c. A Supervisory Role
d. A Technical Role
e. A Transcription Role
f. A Clerical Role

CONCLUSION #3

The MRA (RRA) is not one role, but a composite of many roles. The RRA Role Profile is shown in Figure IV-1.

CONCLUSION #4

The MRT (ART) is not one role, but a composite of many roles. The ART Role Profile is shown in Figure IV-2.

CONCLUSION #5

The MRA and MRT composite role profiles are dissimilar and those dissimilarities can be identified. Role dissimilarities are shown in Figure IV-3.

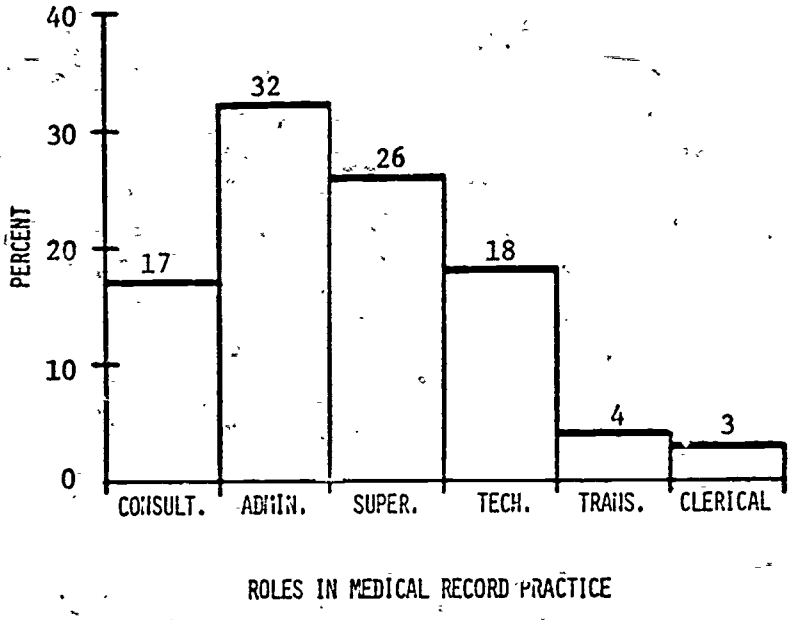


Figure IV-1. RRA Role Profile

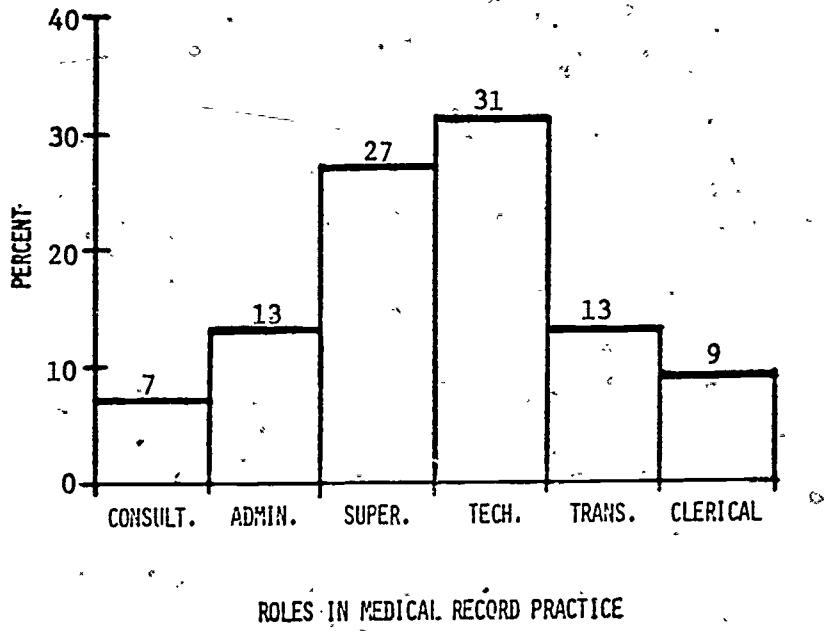


Figure IV-2. ART Role Profile

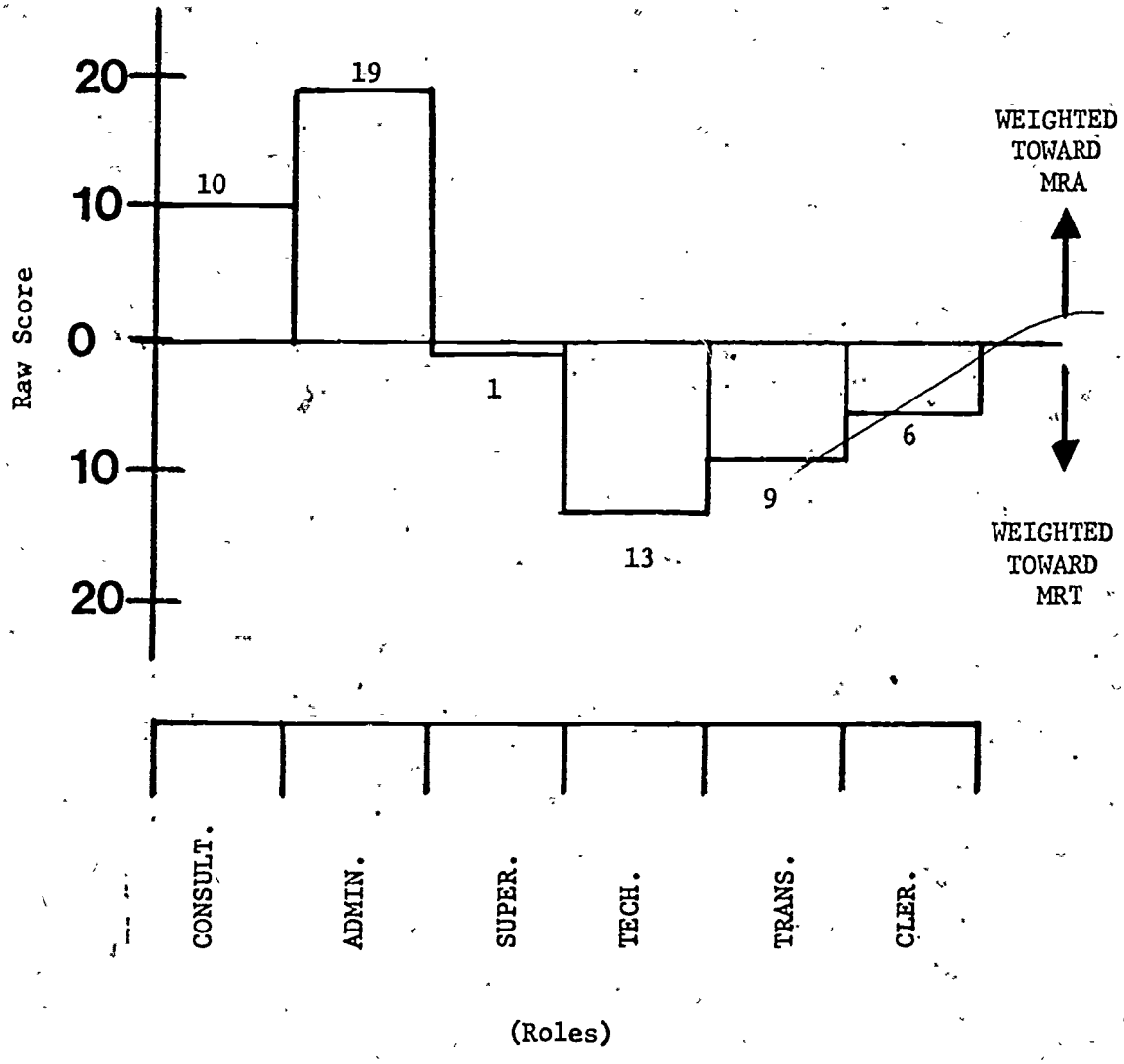


Figure IV-3. MRA and MRT Role Dissimilarities

CONCLUSION #6

There are identifiable functions in medical record practice and they can be classified into functional elements.

CONCLUSION #7

One classification scheme for functional elements* found acceptable and usable contains 19 elements (in alphabetical order):

a. Admitting Functions
b. Anatomy and Physiology
c. Classification and Indexing Systems
d. Current Trends in Health Care Delivery
e. Health Care Records; Content, Format, and Documentation of
f. Health Information Systems
g. Health Statistics, Collection and Display
h. Information Storage and Retrieval
i. Legal Aspects
j. Licensing, Certifying and Accrediting Agencies
k. Management, Principles and Functions of
l. Medical Science
m. Medical Staff, Organization and Functions
n. Medical Terminology
o. Other - Miscellaneous
p. Personnel Administration
q. Quality Assurance Systems
r. Transcription
s. Typing

CONCLUSION #8

A functional profile can be drawn for the MRA, using the 19 elements identified. The profile can be expressed in graphic or numerical form. See Figure IV-4 for the profile.

*Note: The state-level input reduced the number of elements from over 60 to 19. Anatomy and Physiology, Medical Science and Medical Terminology are included here because they are indispensable to the actions to be performed.

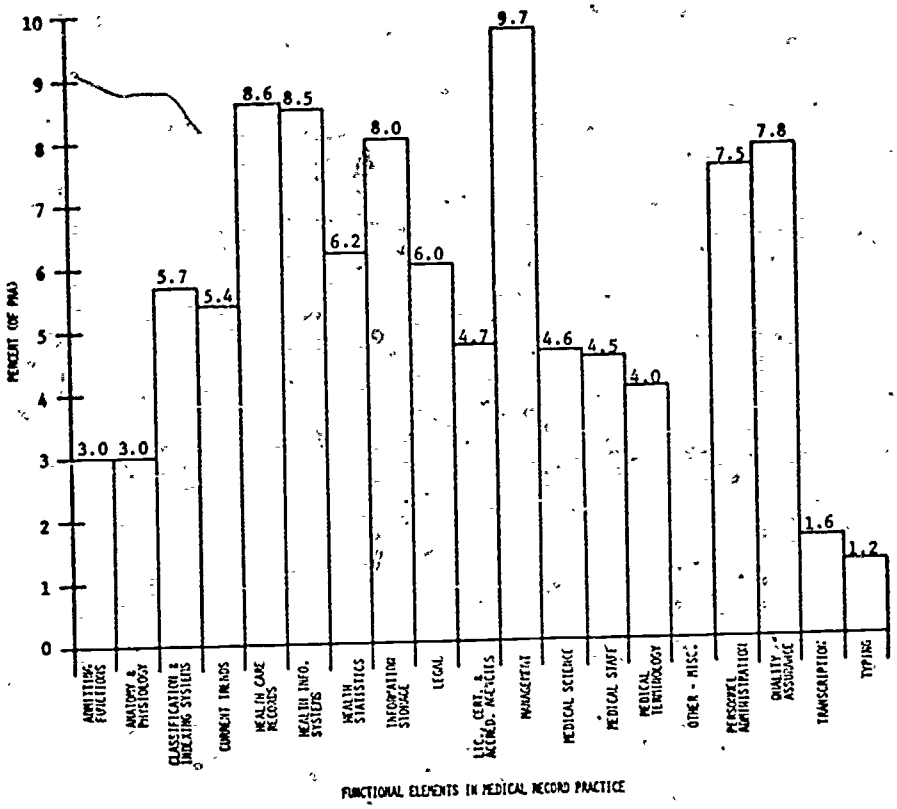


Figure IV-4. MRA Functional Element Profile

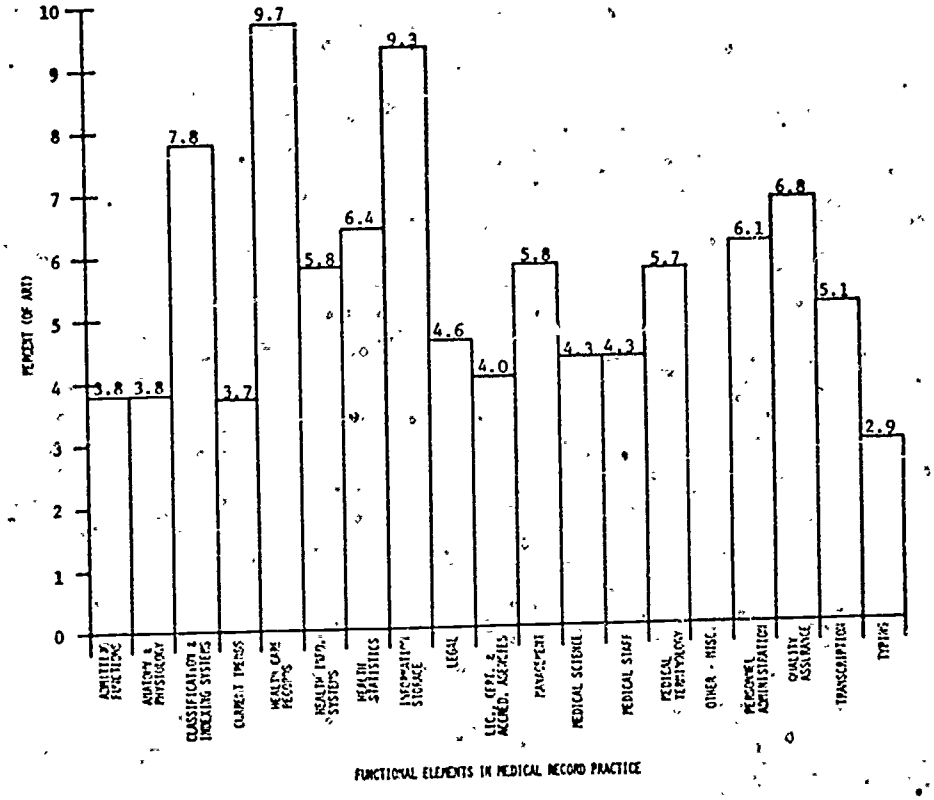


Figure IV-5. MRT Functional Element Profile

CONCLUSION #9

A functional profile can be drawn for the MRT. See Figure IV-5 for a graphic representation.

CONCLUSION #10

By comparing the MRA and MRT profiles, the perceived differences can be graphically displayed. Figure IV-6 shows the perceived differences.

LEVELS AND TITLES

CONCLUSION #1

There is a lack of standardization of titles and levels in medical records. The state-level review committees reported 299 individual titles over a range of nine levels. Over 10% of the titles were non-descriptive.

CONCLUSION #2

A standardized analytical model is needed.

CONCLUSION #3

An analytical model (or set of standardized models), based on the data provided from state-level input, can be prepared.

CAREER MOBILITY

CONCLUSION #1

The current trends toward equal employment opportunity are based on the Civil Rights Act of 1964.

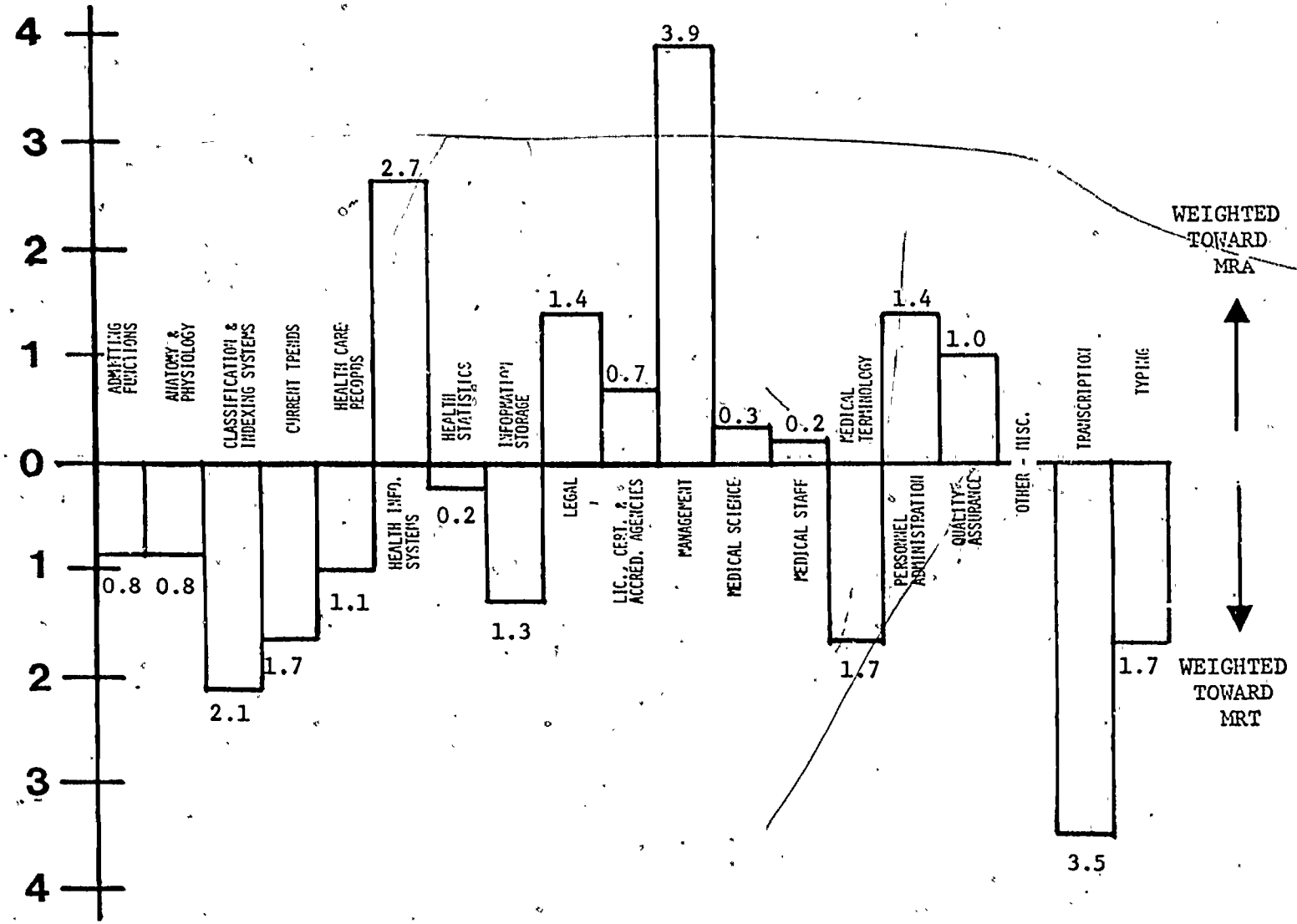


Figure IV-6. Differences between the MRA and MRT Profiles

CONCLUSION #2

Employment practices (recruitment, selection, hiring, promoting, granting of pay increases and benefits, etc.) continue their trend toward job-performance competencies. The following may be considered to be limiting and therefore discriminatory:

a. Professional Membership
b. Testing (other than competency-based proficiency tests)
c. Limited Recruitment

CONCLUSION #3

In order to be non-discriminatory, a test must be "competency-based" and be an objective measure predictive of job success.

CONCLUSION #4

There is limited career mobility in the medical record field, especially in movement to the RRA level. To become an RRA one must:

a. Be a graduate of an approved program for medical record administrators.

b. Pass a registration exam which was <u>not designed</u> to fully measure job-related competences.

CONCLUSION #5

There is adequate career mobility to the MRT (ART) level, through existence of the correspondence course.

CONCLUSION #6

There appears to be insufficient data available to medical record administrators on career mobility issues and discriminatory employment practices.

CONCLUSION #7

At this time, an employment opportunity which requires a RRA might be judged as a "closed" employment opportunity. However, the judgment as to whether the current practices are discriminatory is a legal matter which can only be established by the courts. If the RRA examination were competency-based, the examination itself would not be discriminatory.

CONCLUSION #8

Properly designed, tested and administered competency-based proficiency tests may:

a. Provide increased career mobility opportunities.

b. Increase the supply of qualified and competent personnel.

c. Improve the quality of medical record practice.

d. Protect the over-all interests of professionals in the field.

STATE-LEVEL RESPONSES

CONCLUSION #1

The majority of the state-level responses were positive. They provided needed support, approval of project activities and useful input.

CONCLUSION #2

There was a strong minority position reported against involvement in any proficiency testing activity, including research. This may have been due to the limited information provided to the state-level reviewers.

CONCLUSION #3

The polarization of opinion, as indicated by the state-level responses, was extreme. There appear to be few "middle-of-the-road" medical record personnel. The medical record practitioners on the state-level review committees were either clearly for an issue or clearly against it.

CONCLUSION #4

Some of the ratings and comments from the state-level committees produced conceptual questions which were difficult for the researchers to handle. These included:

a. Why did the states rank Career Mobility and Proficiency Testing as the two items with which the Project should be least concerned? Their comments reflected a high degree of concern.

b. Why were the "professional interests" rated so much higher than the other concerns?

c. Why did the states rank the Feasibility Study so low? Only by studying all the aspects of the proficiency testing requirements could the profession be protected.

CONCLUSION #5

The state review of the Chart of Functional Areas and Summary Sheets provided a needed technical evaluation. As a result of the review:

a. The Functional Areas were rechecked for omissions, duplication and classification errors.

b. The Functional Areas were redefined into 19 Functional Elements.

c. 1257 individual changes were made in the Summary Sheets.

d. The Summary Sheets were organized into the 19 Functional Elements.

EDUCATIONAL AREAS

CONCLUSION #1

The current legislative and legal actions may have a significant impact on medical record education.

CONCLUSION #2

If competency-based proficiency testing becomes a reality, medical record educators must re-examine the medical record curriculum to insure that job-related competencies are emphasized.

CONCLUSION #3

If competency-based proficiency testing becomes a reality, medical record education must develop and test student competencies at a higher educational-taxonomy level.

CONCLUSION #4

As legislative/legal mechanisms continue to expand education and employment opportunities, the medical record programs will need to become more responsive.

CONCLUSION #5

There is a definite movement among state-level educational offices to promote the 2+2 system (i.e., two years for an associate program, two additional years for a baccalaureate program, with a requirement that all credits earned in the two-year program be transferred).

CONCLUSION #6

In 1968, the Vocational Amendments provided two-year institutions with the authority, responsibility, and funding to carry on vocational training. Since then, the two-year institutions have expanded the scope and quality of their vocational offerings. During this time, many two-year institutions have expanded their medical record offerings.

CONCLUSION #7

The MRA and MRT programs (prior to December, 1974) appeared to have more medical record courses in common than they have differences. (See A Comparative Analysis of Selected MRA and MRT Programs, AMRA, 1975, a separate report from this project.)

CONCLUSION #8

There appears to be a lack of educational resources available to the academic medical record programs. The major problems are:

a. Lack of job-specific educational materials.

b. Lack of sufficient faculty with the desired combinations of teaching competencies, curriculum competencies, and technical competencies.

CONCLUSION #9

AMRA's Correspondence Course for Medical Record Personnel provides:

a. An alternate route providing employment mobility to the ART level.

b. An opportunity to upgrade medical record practice for over 3000 medical record personnel, per 1974 enrollment; (to date over 8,700 persons have completed this course).

The need for the program is evidenced by the continued growth of "consumer demand."

CONCLUSION #10

Other correspondence education courses for medical record personnel may be viable and necessary.

RESEARCH AND DEVELOPMENT IN MEDICAL RECORDS

CONCLUSION #1

It is recognized that Research is an excellent method to identify methods and options on which management decisions can be made; however, research and development in medical records have evolved but the efforts have not been managed or controlled on a systematic basis and priorities for pure, applied research have not been established.

CONCLUSION #2

No adequate "task analysis" data existed for medical records as of 1974.

CONCLUSION #3

Development of materials and other resources for medical record education is needed.

SECTION V

MEDICAL RECORD MODELS

GENERAL

During the various research and development efforts of the Project, the Project Staff developed ideas or concepts which were not clearly Results, Conclusions or Recommendations. These ideas and concepts are shared in this section, which contains the following five parts:

- General
- Test Development Model
- Test Adoption Model
- Career Progression Models
- Educational Models

TEST DEVELOPMENT MODEL

Should the Bureau of Health Resources Development, HEW, contract for development of proficiency tests, the AMRA Roles and Functions Project submits the following, relative to a Test Development Model.

DEFINITION OF PROFICIENCY TESTING

The Roles and Functions Project accepts, in part, Mr. Thomas Hatch's (BHRD) definition of proficiency testing:

> "Proficiency testing assesses an individual's technical knowledge and skills related to the performance requirements of a specific job."

The important part of this definition is, "related to the performance requirements of a specific job." If affect had been added to "technical knowledge and skills", the definition would have been immediately adopted by the Project.

TEST DEVELOPMENT DESIGN

An acceptable test for medical records must:

1. Contain affect, skill and knowledge items
2. Measure job-related competencies
3. Measure competencies at the appropriate level-of-performance
4. Be adequately validated by evaluating:
    a. Test Structure
    b. Test Development Process
    c. Outcomes

Test Structure

Proficiency examinations should be constructed to measure:

Item Group	Importance
Skills Development	35%
Knowledge Base	35%
Affective Development	30%

Skills/ Knowledge Measurement

The relative weights of the skill and knowledge test areas should be based on the 18 functional areas reported in Table V-1. A Roles and Functions Project document, entitled A Bank of Behavioral Objectives on Medical Record Practice, AMRA, 1975, contains thousands of job-related performances. These performances are organized under 19 functional areas (18 specific, 1 general).

Each performance is followed by an answer, measure or reference. In addition, each performance has taxonomatic codes (Bloom's Taxonomy of Educational Objectives, Handbook I - Cognitive Domain) assigned for each occupational level.

Test items should measure for the applicable and appropriate taxonomatic codes (level-of-performance).

TABLE V-1. Functional Elements
(Ranked and Weighted)

ELEMENTS: MRA	%	ELEMENTS: MRT	%
Management, Principles & Functions of	9.7	Health Care Records Content, Format & Documentation of	9.7
Health Care Records Content, Format & Documentation of	8.6	Information Storage & Retrieval	9.3
Health Information Systems	8.5	Classification and Indexing Systems	7.8
Information Storage & Retrieval	8.0	Quality Assurance Systems	6.8
Quality Assurance Systems	7.8	Health Statistics, Collection and Display	6.4
Personnel Administration	7.5	Personnel Administration	6.1
Health Statistics, Collection and Display	6.2	Management, Principles & Functions of	5.8
Legal Aspects	6.0	Health Information Systems	5.8
Classification and Indexing Systems	5.7	Medical Terminology	5.7
Current Trends in Health Care Delivery	5.4	Transcription	5.1
Licensing, Certifying & Accrediting Agencies	4.7	Legal Aspects	4.6
Medical Science	4.6	Medical Staff, Organization and Functions	4.3
Medical Staff, Organization and Functions	4.5	Medical Science	4.3
Medical Terminology	4.0	Licensing, Certifying & Accrediting Agencies	4.0
Anatomy & Physiology	3.0	Anatomy & Physiology	3.8
Admitting Functions	3.0	Admitting Functions	3.8
Transcription	1.6	Current Trends in Health Care Delivery	3.7
Typing	1.2	Typing	2.9

Consideration should be given to testing "skills" by task simulation, using such techniques as "in-basket/out-basket", "work station", etc.

Affective Measurement

The affect portion of the test shall measure job-related attitudes as set forth in the Final Report on Affect Measurement of Medical Record Personnel, which is included in the Appendix. Table 2, pages 6 and 7 show the areas (Ethical Principles) which should be measured. They also show the Taxonomy Codes assigned, which refer to Handbook II - Affective Domain of the Taxonomy of Educational Objectives.

Test Development Process

For continuity and maximum utilization of existing resources, the Project Staff highly recommends the use of the following groups during the test development phase:

- AMRA Education and Registration (E&R) Committee. This committee has, among other duties, the responsibility to "maintain accreditation and registration standards by providing suitable examinations..."

- Subcommittee for the Review of Qualifying Examinations. This subcommittee has the responsibility of examining and evaluating each test item proposed for the existing AMRA accreditation and registration examinations.

- AMRA Item Writing Committee. This standing committee has as it's duty to "Prepare well constructed, original questions for the (test) Item Pool of the AMRA suitable for use in the national qualifying examinations -." They are also charged with, "Update (of) all items..." and to, "Develop and update the Outline of Content for the national qualifing examinations."

> * NOTE *
>
> These three groups represent a considerable resource in testing, education, accreditation and registration. They have been heretofore uninvolved in the Roles and Functions Project. If proficiency-testing is instituted by AMRA, these groups MUST be involved.

- AMRA Roles and Functions Work Groups. These groups (skill, knowledge and affect) were made up of highly qualified medical record practitioners. They prepared the behavioral objective bank and the three affect options. They appear to be the most qualified group to advise on test item development.

- AMRA Roles and Functions Advisory Council. This council represents the users and coordinators of medical record practice. They have been involved in the "process and policy" decisions during the AMRA's involvement.

The test developer should demonstrate a knowledge and appreciation of the issues on discrimination and document how the legal requirements under Part 1607, Chapter XIV of Title 29 - Labor (See 35 F.R. 1233) and Title VII of the Civil Rights Act of 1964 (as amended) shall be met.

The AMRA Roles and Functions Project Staff indicates a strong concern for validity of "process" and recommends a comprehensive formative

evaluation of all test development activities. Further, the results of the process-formative evaluation should be made available to AMRA for review and comment.

Outcome

Field-testing is a universally-accepted method of outcome evaluation for examinations. The Project Staff recommends a rigorous field-test.

The test developer should test at least three different groups to validate the tests and their test items. For medical records these groups might be:

1. Entering MR Students
2. MR Program Graduates with no experience
3. MR Program Graduates with five years experience

The test items should discriminate between the three groups.

In addition, an item analysis of the validated test items should be done. The item analysis should include identification and presentation of the taxonomatic codes for each functional area (skill and knowledge) and for each affective area.

SUMMARY

The responsibility for design and documentation of evaluative information falls heavily on the test developer. In addition to the important legal questions, the test developer should recognize that the acceptability of the resultant tests will be judged by AMRA on the basis of the information supplied. The test developer must present the validation results in such a way to document the fact that only qualified, competent personnel can pass the examinations. Should the test developer be unable to demonstrate total validity of the tests, AMRA will not recommend adoption.

TEST ADOPTION MODEL

The Project Staff does not endorse any specific testing mechanism or set of eligibility requirements at this time. The reason; the tests' ability to adequately measure job-related competencies at the appropriate level-of-performance is unknown at this time.

Instead of an endorsement, the Project Staff recommends the following two-step procedure be executed by AMRA after any proficiency test has been developed and field-tested:

Step 1. Review field-test results for adequate test discrimination.
- a. The tests should clearly discriminate between:
  - (1) New MR Students
  - (2) Graduate (but inexperienced) MR Students
  - (3) Experienced MR Personnel
- b. The tests should not discriminate against any group protected by the Civil Rights Act of 1964 (as amended)
- c. The tests shall measure job-related competencies

Step 2. On the basis of results and other future information, select one of the following possibilities:
- a. Reject tests for not being clearly discriminatory.
- b. Reject tests for not measuring competencies.
- c. Adopt the tests as a replacement for the existing RRA and ART tests, without changing the eligibility requirements to sit for the tests.
- d. Adopt the tests for RRA and ART, changing the minimum eligibility requirements to:
  - (1) For RRA:
    - (a) BA from Accredited MRA Program (or)
    - (b) ART and BA (or)
    - (c) ART and five-years of documented experience as supervisor
  - (2) For ART:
    - (a) Graduation from Accredited MRT Program (or)
    - (b) Any BA and two-years of documented experience
    - (c) Completion of AMRA MRP Correspondence Course
- e. Adopt the tests for RRA and ART with no prerequisites. (This would be done if it could be shown that the tests actually measure job-proficiency.)

CAREER-PROGRESSION MODELS

The State-Level Review Committees, as part of their Task 2, provided an excellent base on which to synthesize "national" career progression models. The Project Staff reduced the state-level data and produced a report. Refer to TASK 2 in the Appendix.

Two synthesized models are presented here, the Linear Progression Model and the Branched Progression Model.

*** NOTE ***

These models have been synthesized for discussion purposes only. They are not approved AMRA models. They can be used as guides or as the basis for further research.

LINEAR PROGRESSION MODEL

As shown in Exhibit 8 in TASK 2 (Appendix), the analysis was done across 9 reported levels. When the various titles were weighted according to the levels, a weighted score can be obtained. The resultant scores were close to the mode and can be considered as the average assigned weight for each title. Figure V-1 shows the titles and scores on a diagonal display. The ranked titles and their scores are shown in Table V-2.

BRANCHED PROGRESSION MODEL

This model is presented in the Appendix. It has been reproduced in Figure V-2. Note that while six levels are shown, no progression arrows are shown, for no standard paths could be identified. It appears possible to move from any title on a level to any other title on the next level.

*** NOTE ***

Page 17b in TASK 2 (Appendix) shows the alternate plan incorporating OJT, Proficiency Testing and Formal Education.

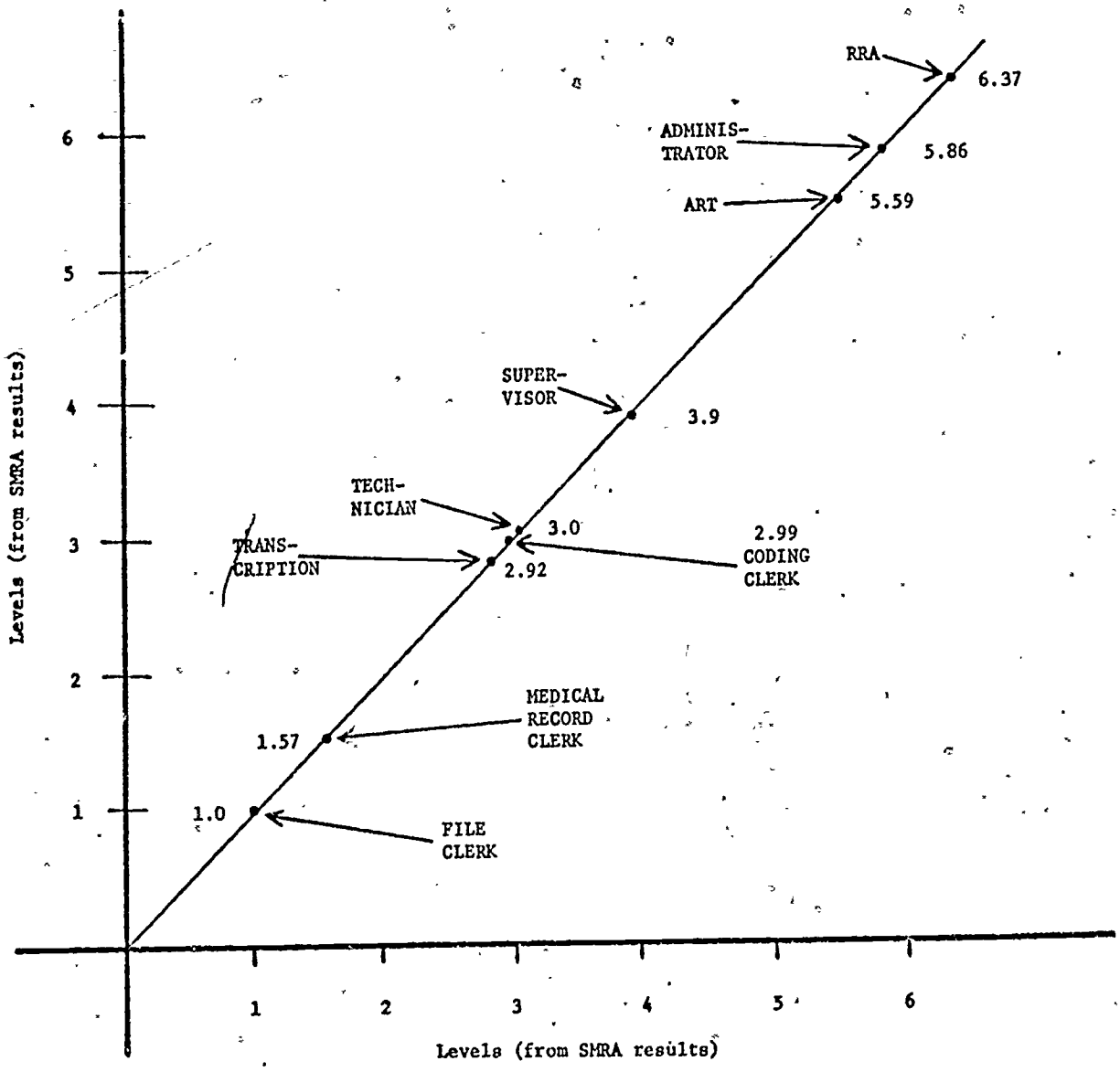
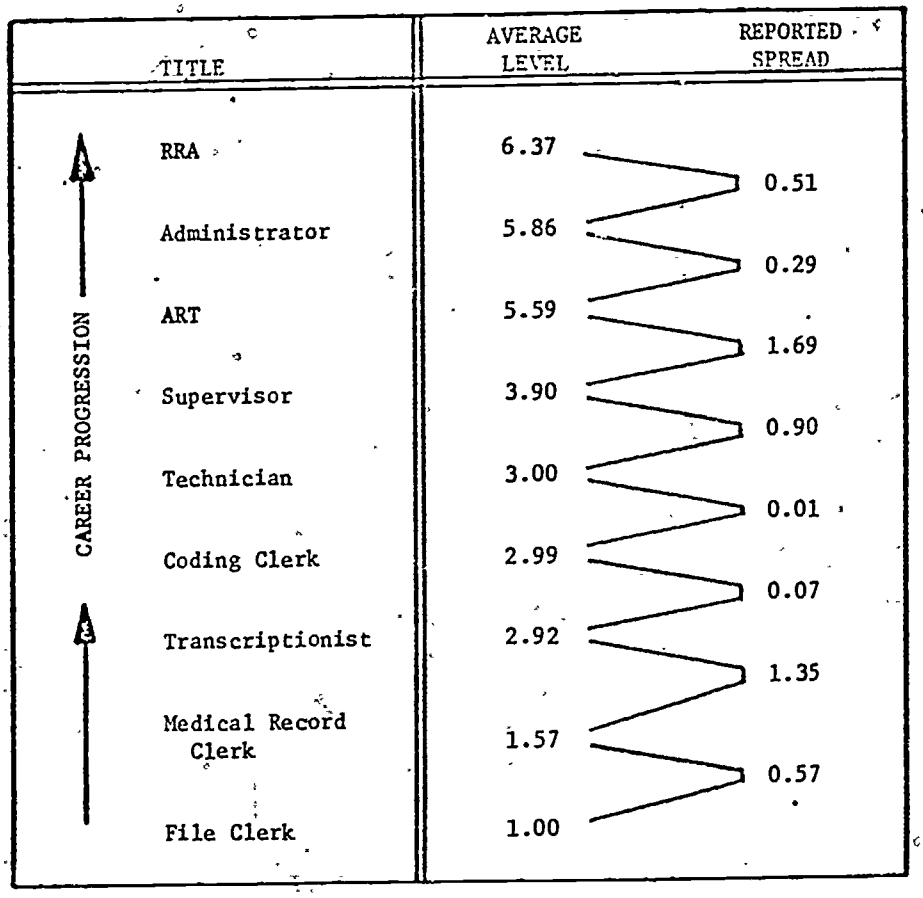


Figure V-1. Diagonal Display (titles and scores)

TABLE V-2. Titles (Ranked and Scored)



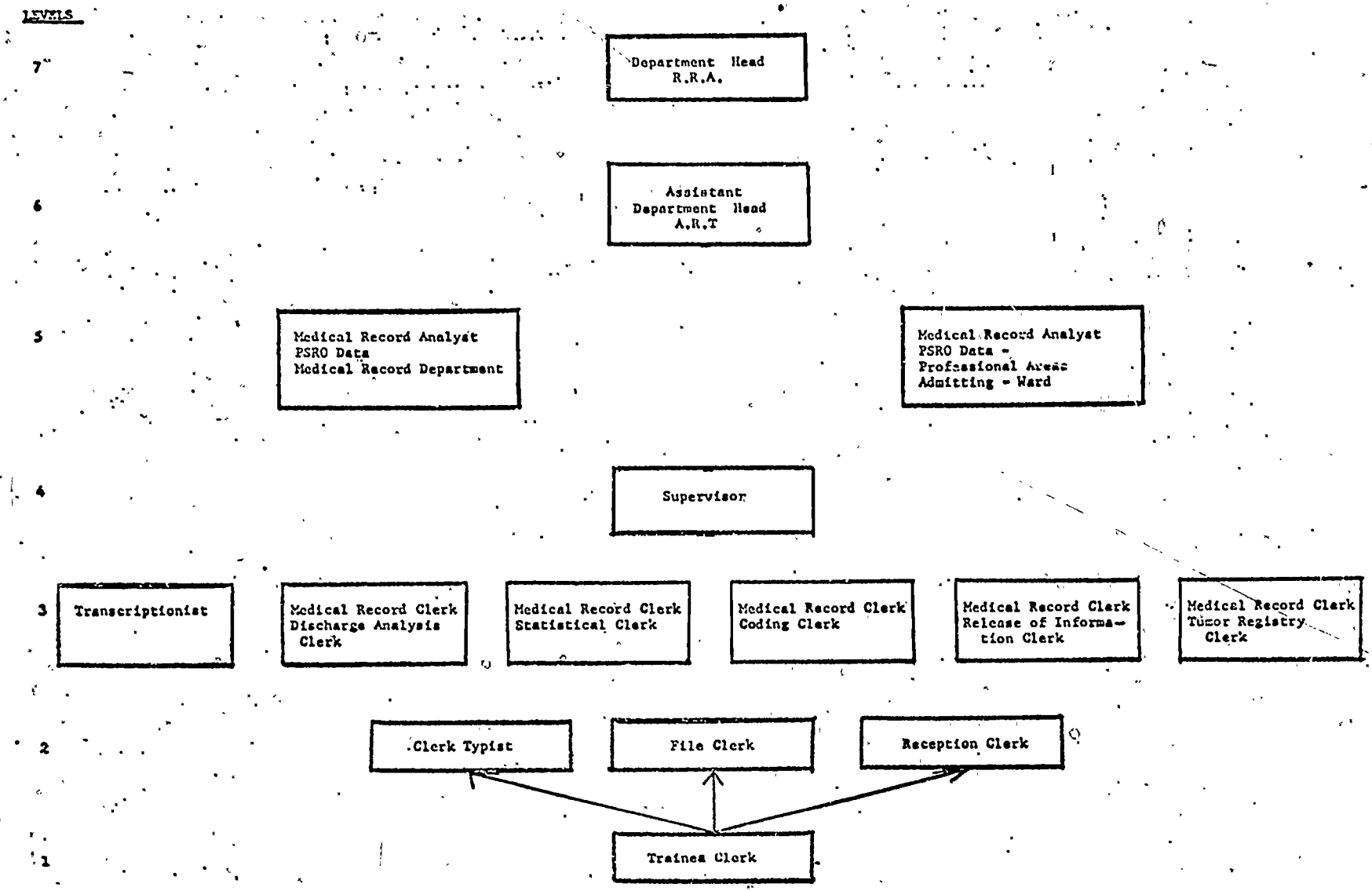


Figure V-2. Branched Progression Model

EDUCATIONAL MODELS

On the basis of the research undertaken in the areas of legal/legislative activities and state-level regulatory agencies, two items are discussed as models. These models are presented as discussion-models, not action recommendations. The Project Staff has evaluated various areas and these models can be considered as "shared-perceptions". The models are:

- Competency-Based Education Model
- Articulation Models

COMPETENCY-BASED EDUCATION MODEL

Competency-measurement may be the only legally-acceptable method of employee selection and promotion. (Employees include RRA's and ART's.) Therefore, it probably is advisable to prepare medical record personnel on the basis of job-related competencies. A procedure which can be used is:

Step 1. Identify the required job-related competencies.
Step 2. Rank and rate these competencies.
Step 3. Identify which competencies should be taught in which courses.
Step 4. Prepare or revise lesson plans to include competency development.
Step 5. Teach competencies.
Step 6. Test students to see if competencies have been adequately developed.

This model has been expanded and is presented as part of A Guide to Curriculum Management, AMRA, 1975.

All educational models should develop job-related skills and affect, not just the job-related knowledge base.

ARTICULATION MODELS

State-level legislators and education agencies appear to be leaning toward "enforced-articulation"; that is, a requirement for

"guaranteed-transfer" of students and units from state-supported Junior Colleges to state-supported Universities.

Should this be the situation, the Medical Record Program Directors should examine existing articulation models. Two models are shown here:

2+2 Model

The "2+2" refers to a planned program where a two-year associate program transfers directly into the last two years of a baccalaureate program. Properly articulated, there would be no loss of credits or continunity. In actual implementation various problems appear.

The Roles and Functions Project developed two items which could be used by schools attempting a 2+2 program.

1. In A Guide to Curriculum Management, paragraph B.6.3 explains one method of examining the functional requirements for the MRA and MRT. When the functional profiles are compared and contrasted, the differences between the technician and administrator programs can be identified.

2. In A Bank of Behavioral Objectives for Medical Record Practice, the "level-of-performance" for various occupational levels has been presented for consideration. Bloom's Taxonomy of Educational Objectives, Handbook I was adopted for the measure. In general, the average administrator-level codes for skills are "5" (Synthesis) and average technician-level codes for skills is "3" (Application). Therefore, it might be feasible to develop and test for one skill level in the technician programs and develop and test for a higher skill level in the administrator programs.

"Step-Off" Career Ladder Model

This articulation model is depicted in Figure V-3. It postulates a 7-rung ladder. Each step represents a job-related position, at which a person could step in or out of the educational process. This model fits the "life-long-learning" philosophy which has gained favor among some educators.

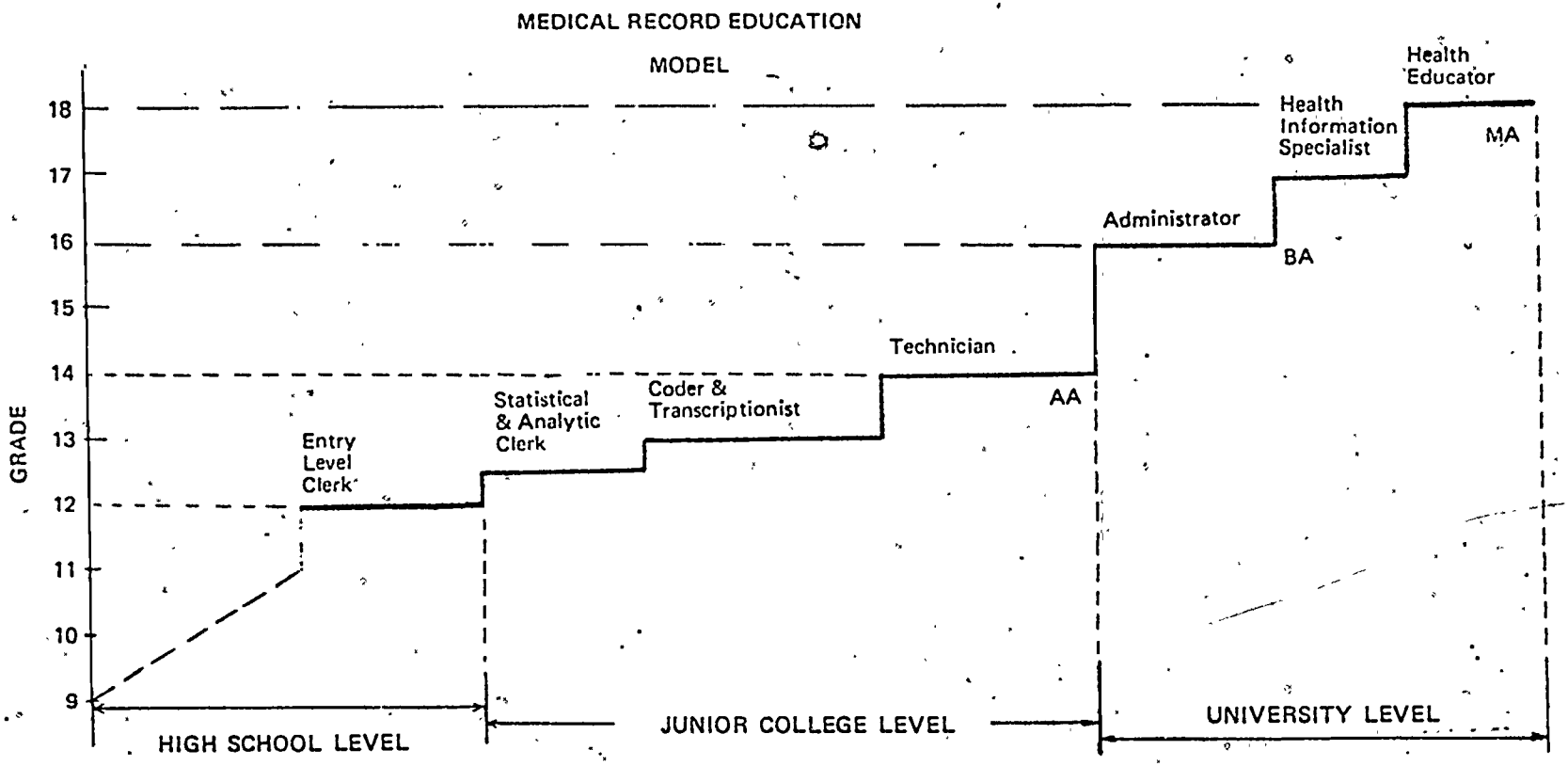


Figure V-3. Multiple "Step-Off" Model

SECTION VI
RECOMMENDATIONS

GENERAL

This section reports the action recommendations formulated by the Project Staff. It contains three parts:

- General
- Statement on Proficiency Test Development
- Action Recommendations

Please note that while the recommendations are based on research findings, they are only the options of the Project Staff. At this time, THEY ARE NOT AMRA POLICY. Only the AMRA House of Delegates and the Executive Board can establish AMRA policy.

STATEMENT ON PROFICIENCY TEST DEVELOPMENT

AMRA, as the organization responsible for professional activities in the field of medical records, has been shown to be vitally interested in maintaining and improving the quality of medical record practice.

The Project Staff shares AMRA's and NIH's commitment to ensure the highest quality of medical record practice, which will in turn support the quality of patient care. Therefore, the Project Staff recommends that AMRA maintain an active role in any future efforts to develop competency-based proficiency tests. AMRA's active role should include:

1. Provide consultation during the preparation of examination questions.
2. Assist in the review of individual examination questions to ensure they are prepared to the proper level-of-performance.
3. Assist in the field-testing to determine the validity and reliability of the examinations.

4. Assist in the norming of the examinations.

5. Promote and contribute to the continuing evaluation and revision of the examinations.

AMRA involvement in these efforts has one major purpose: To protect the professional interests of medical record practitioners by assuring that any resultant test actually measures the required competencies. It is the Project Staff's position that if the resultant tests only measure knowledges and low-level clerical skills, the examinations and the entire concept of proficiency testing should be rejected.

ACTION RECOMMENDATIONS

RECOMMENDATION #1

That this report be reviewed and discussed by AMRA. The review should include these items of special interest:

a. Legislative Factors (Page III-1 to III-10)

b. State-Level Input (Pages III-10 to III-15)

c. Feasibility of proficiency Testing in Medical Records (Pages IV-3 to IV-4)

d. AMRA's Options Regarding Proficiency Testing (Table IV-1, page IV-2a)

e. Statement of Proficiency Test Development (Page VII-1)

RECOMMENDATION #2

That selection be made of one of AMRA's Options Regarding Proficiency Testing. The Project Staff, based on a two-year study and the collective opinions of the Work Group Members and the Advisory Council, recommend that Option II-A be selected (Table IV-1).

RECOMMENDATION #3

That there be coordination of activities with BHRD and the test development contractor.

RECOMMENDATION #4

That AMRA develop and coordinate all regulations governing the administration of examinations for medical record personnel.

RECOMMENDATION #5

That AMRA develop and control all regulations relating to credentialing mechanisms, policies and procedures.

RECOMMENDATION #6

That AMRA continue to promote a special membership-information program regarding proficiency testing, especially the legislative factors, present trends and project findings. AMRA should embark on a program to inform the membership-at-large about the laws and regulations regarding proficiency testing, competency-based selection and promotion practices, and career mobility. Possible mechanisms include:

a. Counterpoint
b. Medical Record News
c. Notices to State Organizations
d. A brochure Summarizing the Project Findings, Conclusions and Recommendations
e. Regional Workshops
f. National Conference Sessions
g. Education Newsletter

RECOMMENDATION #7

That provisions should be made to regularly and systematically review, expand and update the following project documents:

a. The Bank of Behavioral Objectives for Medical Record Practice

b. The Comparative Analysis of Selected MRA and MRT Educational Programs

c. The "Pittsburgh Update" entitled, 18 Years of Change -- 1957-1975: Functional Changes in Medical Records

d. A Guide to Curriculum Management

RECOMMENDATION #8

That AMRA consider the feasibility of putting The Bank of Behavioral Objectives data in a computer bank. If properly coded and stored, it will not only make regular updating possible, but the data could also be used for:

a. Curriculum Evaluation and Management
b. Curriculum Development
c. Educational Materials Development
d. Test Development
e. Research and Analysis
f. Ordered Displays of RRA Skills and Knowledges
g. Ordered Displays of ART Skills and Knowledges
h. Ordered Displays of Six Occupational Roles
i. Display of the Similarities and Differences Between the RRA, ART and Other Various Occupational Levels.

RECOMMENDATION #9

That AMRA actively promote the expansion of "research and development" at the national level, as well as at other levels such as:

a. Regional Level
b. State Level
c. Educational Programs (Staff and Students)
d. Institutional Level
e. Individuals

A discussion of the research and development needs in medical records is included in Recommendation 14.

RECOMMENDATION #10

That AMRA perform a field-review of A Guide to Curriculum Management prior to release for general use.

RECOMMENDATION #11

That AMRA investigate the feasibility of promoting better "professional-attitude" adjustment for medical record personnel. Various indications during the research process revealed a possible need for better understanding on inter- and intra-professional relationships.

RECOMMENDATION #12

That AMRA publicize the availability of the Final Report of Roles and Functions Project and inform the membership-at-large and other health professions of its major findings and implications.

RECOMMENDATION #13

That AMRA promote the establishment of state-level legislative review committees to regularly review current state and national legislation. Areas of current concern might include:

a. Proficiency Testing
b. Quality Assurance
c. Licensure and Certification (Institutional and Professional)
d. Legal and Reporting Requirements
e. Content of Medical Records
f. Data Security

RECOMMENDATION #14

That AMRA investigate the feasibility of undertaking research and development in the following areas:

a. Decision Making Tools for Management

b. Manpower
   (1) Manpower Surveys
   (2) Current Manpower Needs
   (3) Manpower Forecasting Methods
   (4) Work Measurement

c. Medical Record Practice
   (1) Changes and Trends in Actual Practice
   (2) Factors Affecting Future Changes
   (3) "Affect" Factors in Actual Practice
   (4) Implications of Advanced and Planned Data Processing Technology

d. Legislative Trends
   (1) Essential Societal Issues
   (2) Quality Assurance
   (3) Civil Rights in:
      (a) Education
      (b) Employment (selection)
      (c) Career Mobility (promotion)
      (d) Availability of Health Care
   (4) Federal and State Research Activities

e. Medical Record Personnel
   (1) Knowledge and Comprehension of Essential Issues by Practitioners
   (2) Changing Roles in Medical Record Practice
   (3) Attitude Development Needs
   (4) Screening Tools for Various Clerical/Technical Tasks
   (5) Work Measurement

f. Education (Inservice and Continuing)
   (1) Current Needs
   (2) Diagnostic Procedures for Continuing Education
   (3) Viable Processes and Materials
   (4) Materials Requirements

g. Education (Educational Programs in Colleges and Universities)
   (1) The "Competency-Based Education" Movement
   (2) Current Utilization of Educational Technology
   (3) Adequacy and Accuracy of Catalog Course Listings and Course Descriptions
   (4) Evaluation Mechanisms:
      (a) Level of Instruction
      (b) Level of Testing
      (c) Application of Instruction to Employment Requirements
   (5) Student Follow-up
   (6) Placement Activities
   (7) Faculty Recruitment Techniques
   (8) Basic Teaching Competencies
   (9) Teacher Preparation Requirements
   (10) Faculty Inservice and Continuing Education Needs
   (11) Graduate Programs (Health Information Administrator)

h. Education (Correspondence)
   (1) Content Analysis of Existing Courses (Third-Party)
   (2) Current Utilization of Educational Technology
   (3) Evaluation Mechanisms
   (4) Other Needs
   (5) Level of Instruction
   (6) Level of Testing

i. Educational Materials
   (1) Needs Assessment--National (to identify priority areas for development)
   (2) Recruitment, Counseling and Selection Materials
   (3) Evaluation Techniques for Educational Materials
   (4) Revision of Outdated Materials
   (5) Supplementing Incomplete Materials
   (6) Adaption of Related Materials
   (7) Development of New Materials
   (8) Integration of "Affective Education" into Present Materials

j. Comparative Studies
   (1) RRA/ART Profiles (Actual Practice)
   (2) Content Analysis: MRA/MRT Educational Programs
   (3) Content Analysis: MRT/Correspondence Educational Programs
   (4) Medical Record Department Activities vs Data Processing Department Activities
   (5) Comparative Studies of Duplicate Data Sets Within Health Care Facilities

RECOMMENDATION #15

That AMRA continue to investigate and develop alternate funding sources for research, development, education and evaluation.

APPENDIX

A. REPRINT:	Policies for the Development of Credentialing Mechanisms for Health Personnel. Operations MEDIHC, Vol. 2, No. 3, February, 1972
B. BIBLIOGRAPHY:	Bibliography
C. SMRA TASK #1:	Report on Task #1. Review of the Project Plan and its Proposed Outcomes Report on their Acceptability Among State Member from Roles, Functions, Training and Proficiency Tests for Medical Record Personnel
D. SMRA TASK #2:	Report on Roles, Functions, Training and Proficiency Tests for Medical Record Personnel. Task #2 Concerning Career Mobility Diagrams for the Profession
E. SMRA AFFECT REPORT:	Final Report on Affect Measurement of Medical Record Personnel
F. EVALUATIVE REPORT:	Formative Evaluation Report for Roles, Functions, Training and Proficiency Tests for Medical Record Personnel Project

APPENDIX A

REPRINT

Policies for the Development of Credentialing Mechanisms for Health Personnel. Operations MEDIHC, Vol. 2, No. 3, February, 1972

operation MEDIHC

M E D I H C

VOL. 2, NO. 3 FEBRUARY, 1972

POLICIES FOR THE DEVELOPMENT OF CREDENTIALING MECHANISMS FOR HEALTH PERSONNEL

Maryland Y. Pennell and David B. Hoover *

Within the National Institutes of Health's Bureau of Health Manpower Education, the Division of Allied Health Manpower is concerned with the support of education and training for allied and public health manpower, and for the development of improved methods of recruiting, training, and credentialing these health workers. While the final responsibility for licensure—the chief form of manpower credentialing—rests with each State, the Federal Government is involved with credentialing through its own employment practices, through development of standards for health care institutions, and through assistance to organizations aiming to improve voluntary credentialing procedures.

Division policies for the development of credentialing mechanisms are presented in the following pages. This statement was discussed at the National Advisory Allied Health Professions Council meeting on November 8, 1971. It has had limited distribution prior to its publication in the *Operation MEDIHC Newsletter.* This media was chosen since individuals whose credentialing problems warrant special concern include large numbers who have been trained in the Armed Forces.

The Division of Allied Health Manpower has authority for special projects related to "developing, demonstrating, or evaluating techniques for appropriate recognition (including equivalency and proficiency testing mechanisms) of previously acquired training or experience" in the allied health field (P.L. 91-519).** Recognition of occupational competency in this field is generally achieved by graduation from an accredited educational program. Recognition may also be conferred by State licensing or registration and/or by professional association certification or registration. However, mechanisms for credentialing, other than through graduation from an accredited educational program, are generally lacking or unsatisfactory.

Within any one occupation there are several levels of entry, typically for (a) the vocationally trained, (b) graduates of associate degree programs or their equivalents, and (c) graduates of baccalaureate programs. Problems of recognition and status are least acute at the vocational training level where, for most occupations, it is questionable whether credentialing is desirable. The credentialing of personnel for jobs for which the appropriate requirement for basic occupational preparation is two years but less than four years of college raises more serious problems. A large proportion of the health work force at this level will not have graduated from an accredited program and is at a disadvantage relative to those who have—unless a non-academic credentialing mechanism is widely accepted.

At the baccalaureate level, many allied health practitioners are inactive and have not maintained their professional registration or certification. Many of these did not meet the current academic standards when they originally obtained their credentials and hence will not qualify for re-certification if they attempt to return to work. In addition, a small but potentially very valuable number of individuals are becoming qualified to work in allied health fields through unconventional ways, but are finding it difficult or impossible to obtain appropriate employment because they lack required credentials.

Individuals whose credentialing problems warrant special concern include:

- Those trained by the armed forces.
- Persons who have not obtained a degree in their field due to technical problems, such as the transfer of college credits, but who have substantially fulfilled degree requirements.
- Formerly registered or certified but now inactive professionals who do not meet current requirements for credentialing.
- Persons performing satisfactorily in jobs which become subject to new requirements for credentials.
- Persons who obtain "extramural degrees" from accredited institutions of higher education which emphasize self-study or credit by examination.

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For persons who can perform in a satisfactory manner in an allied health occupation but who have not completed an accredited educational program for financial or other reasons, there are two principal alternatives in seeking professional credentials. One is to meet academic requirements through examination; rather than by attendance at school. These "academic equivalency examinations" if constructed for a single course are usually referred to as "course credit examinations." There may also be more general testing to determine the student's competence in the humanities or basic sciences. Especially in the latter case, the amount of collegiate credit awarded to the student and the specific courses from which he will be excused are matters determined by the college for each individual applicant.

The second alternative route to credentialing is to seek, through examination, professional or vocational rather than academic recognition. Occupational proficiency examinations are intended to determine whether the individual meets job knowledge requirements, which are not necessarily the same as the knowledge required to obtain a degree in the field. These examinations may also include a determination of whether the individual possesses the necessary skills to perform adequately. This determination of skill most frequently takes the form of observation or an experience requirement rather than demonstration of skill in a structured test setting, since the latter is difficult to design.

The term "job knowledge requirements" commonly refers to the technical knowledge utilized in a job or in a set of similar jobs that a detailed task analysis, if done, would reveal. In addition, a professional or semi-professional worker is expected to have a more general body of knowledge which, although not obviously drawn upon in the day-to-day performance of his job, is important to him, to his employer, and to the people he serves for a variety of reasons. It allows him to fill the many types of jobs allotted to his profession or occupation with a minimum of re-orientation and further training. It also provides a foundation for continuing education and self-improvement efforts, and enables him to deal more effectively with unusual circumstances or problems.

Occupational proficiency tests do not attempt to measure an individual's command of this general body of knowledge which is unrelated to specific performance on the job. For this purpose, academic equivalency examinations and/or evidence that the candidate for credentials has completed a certain amount of collegiate work in the humanities and basic sciences may be used. However, since there are no precise relationships between this general knowledge and job performance, the imposition of such requirements for obtaining credentials in any occupation is a matter of judgment only.

Excepting skill examinations, proficiency tests are not difficult to construct and norm once agreement is reached on what should constitute job knowledge requirements. In contrast, academic equivalency examinations must be much more carefully validated and normed if they are to be accepted by a substantial number of colleges and universities. In addition, course credit examinations must bear a demonstrable relationship to the content of the course at the particular college in which the student seeks credit. A course credit examination in technical health subject matter typically takes two years to develop plus an additional length of time to gain widespread approval and usage. For these reasons and because many more health workers may benefit from proficiency tests than from equivalency examinations, proficiency testing is of primary concern to the Division of Allied Health Manpower. The policies and procedures outlined below concern the development of occupational proficiency examinations only.

Objectives

In developing proficiency-oriented health manpower evaluation mechanisms, the Division has the following objectives:

1. To promote national credentialing systems for the allied health professions that will minimize the difficulties of seeking recognition of qualifications without compromising the standards upon which credentialing is based;

2. To have such credentialing systems largely or wholly self-sustaining, after initial development of standards and administrative procedures.

3. For health occupations which credentialing is appropriate, to develop acceptable and valid methods of determining that an individual is satisfactorily proficient. For occupations which rely for credentialing on completion of an accredited educational program, one or more alternate methods should be developed to convey an equal degree of recognition of proficiency.

4. To develop these methods, simultaneously if possible, for the established entry-levels of an occupation, except those entry-levels for which vocational training is adequate preparation. Typically, entry-levels suitable for proficiency examinations are (a) the technician or assistant level for which an associate degree program or its equivalent is considered desirable preparation, and (b) the technologist or therapist level for which a baccalaureate degree program is the normal preparation.

5. To promote a set of standards for proficiency in an occupation, applicable to all levels for which proficiency tests are appropriate, so that these standards may serve:

a. To confer, via certification or registration, recognition by professional associations or by an independent registry for the occupation.
b. As objectives for the professional and/or technical component of educational programs, including continuing education activities.
c. For licensing or registration of individuals by government agencies.
d. To satisfy Federal requirements for the qualification of manpower employed by non-Federal institutions or agencies.
e. As qualifications for Federal employment.

Principles

In supporting the development of proficiency tests, the Division of Allied Health Manpower will follow these principles:

1. Proficiency standards should be based upon (a) a current evaluation of the role and function of the occupation or discipline within the health system, and of the various levels (e.g., aide, technician or assistant, technologist or therapist) within the discipline, and (b) a current assessment of the knowledge and skills deemed essential to satisfactory performance in entry jobs at each of these levels. This assessment will be in the form of professional judgment, utilizing whatever job studies may exist, supplemented by expert knowledge as required. A detailed task analysis for the occupation is not a necessary prerequisite for the initial development of these standards.

2. Proficiency standards should be determined by concurrence of expert individu... epresenting the following interests:

a. Employers, including Federal agencies.
b. The occupation at each of the levels for which qualification mechanisms are to be devised.
c. Specialists utilizing the services of the discipline.
d. Educators in the field, including vocational education authorities.
e. Federal manpower regulatory agencies.
f. The public as consumers of health services.

Test development specialists should advise these experts, in order to assure the maximum use of objective tests in the application of standards.

3. Mechanisms for determining an individual's proficiency should be as objective as possible, utilizing scientifically constructed tests to the maximum extent. A testing program may be supplemented by requirements for credentialing, such as a minimum amount of supervised experience, a minimum amount of formal general education, or demonstration of clinical skills if these are considered necessary by the group responsible for determining standards.

4. No organization should profit monetarily from the credentialing of allied health manpower (except proprietary firms contracting to carry out specific developmental or administrative activities). Persons desiring credentialing should be expected to bear the costs if they are not unduly burdensome.

5. Ownership of any tests, test questions, and related materials developed with Government funds will ordinarily remain the property of the Government, which will make the tests available, subject to security precautions, to any non-profit organization which wishes to cooperate in pursuing the above objectives.

6. When it is clear that only one professional association represents the interests of all persons at all levels in an occupation, the Division regards it as appropriate to develop proficiency standards as a joint venture with that association, and will consider a contractual relationship with the association for this purpose. When more than one association represents these interests, the Division will seek arrangements for fair and equitable consideration of the standards being developed.

* * * * *

PROFICIENCY EXAMS

Proficiency examinations are new for health occupations. Attempts have been made within the past few years to establish standards for performance and criteria for judging the qualifications of *physical therapy personnel* to perform competently. A test for physical therapy assistants has been developed by the Professional Examination Service under contract with the Division of Allied Health Manpower, for the use of State licensing boards. The test for physical therapists resulted from the need for qualifications under the Medicare program and was developed under the aegis of the Division of Medical Care Standards of the Health Services and Mental Health Administration (a component of the Department of Health, Education, and Welfare, as is the National Institutes of Health.)

For *clinical laboratory personnel*, tests have been developed for and administered to clinical laboratory directors—again related to the qualifications of health care personnel under the Medicare program. Proficiency tests exist for clinical laboratory personnel at the technician level, developed by the Educational Testing Service under contract with the Department of Labor. Equivalency examinations for academic credit in four subject matter areas for clinical laboratory personnel at the technician level are being developed by the Educational Testing Service under contract with the Division of Allied Health Manpower.

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The numbers of proficiency tests can be expected to increase as more and more emphasis is placed on satisfactory performance on an examination as an alternate to the educational and other specific criteria for allied health workers. To develop and administer such tests requires considerable time. Staff within the Department are engaged in contractual arrangements related to the qualifications of practical nurses, radiologic technology personnel, and occupational therapy personnel, for contracts to be awarded this fiscal year.

Pending legislation recommends the adoption of a system of proficiency testing for recruiting and upgrading health personnel in connection with the Medicare and Medicaid programs. It would require the Secretary of HEW to develop and use proficiency tests to determine the work qualifications of health personnel who do not meet the formal criteria specified in the Medicare regulations. This testing would be applicable to therapists, technologists, technicians, and other health care personnel.

Secretary Richardson's recent report to the Congress on Licensure and Related Health Personnel Credentialing contains a chapter on Proficiency and Equivalency Testing. The report calls for a study of the feasibility of establishing a national system of certification of certain categories of health personnel. Plans for implementing this action are under consideration.

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GLOSSARY

Accreditation is the process by which an agency or an organization evaluates and recognizes a program of study or an institution as meeting certain predetermined qualifications or standards. Accreditation shall apply only to institutions and programs.

Certification is the process by which a non-governmental agency or association grants recognition to an individual who has met certain predetermined qualifications specified by that agency or association.

Challenge examination is equivalency testing which leads to academic credit or advanced standing in lieu of course enrollment by candidate.

Credentialing is the recognition of professional or technical competence. The credentialing process may include registration, certification, licensure, professional association membership, or the award of a degree in the field.

Equivalency testing is the comprehensive evaluation of knowledge acquired through alternate learning experience as a substitute for established educational requirements.

Licensure is the process by which an agency of government grants permission to persons meeting predetermined qualifications to engage in a given occupation and/or to use a particular title, or grants permission to institutions to perform specified functions.

Proficiency testing assesses technical knowledge and skills related to the performance requirements of a specific job; such knowledge and skills may have been acquired through formal or informal means.

Qualifying examination is a criterion for measuring an individual's ability to meet a predetermined standard.

Registration is the process by which qualified individuals are listed on an official roster maintained by a governmental or non-governmental agency.

Terminology for health occupations is confusing unless the job title may be expressed according to the most generally accepted appropriate requirement for basic occupational preparation. An attempt to standardize terminology is:
"Technologist"; "Therapist": educational preparation at the baccalaureate level or above.
"Technician": "Assistant": educational preparation at the associate degree level (2 years of college education or other formal preparation beyond high school).
"Aide": specialized training of less than 2 years duration beyond high school, or on-the-job training.

APPENDIX B

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APPENDIX C

SMRA TASK #1

Report on Task #1. Review of the Project Plan and its Proposed Outcomes Report on their Acceptability Among State Member from Roles, Functions, Training and Proficiency Tests for Medical Record Personnel

Report on Task #1

Review of the Project Plan and its Proposed Outcomes Report on their Acceptability Among State Member from Roles, Functions, Training and Proficiency Tests for Medical Record Personnel.

I. INTRODUCTION

The researcher approached the summary report on Task #1 by reviewing all data submitted by State Review Committees, by tallying all answers to the questionnaires and analyzing the comments in an effort to prepare a report for the membership of the findings. Since the study of Task #1 has three component parts, each will be reviewed and the analysis presented. The study involves forty five states, one Protectorate (Puerto Rico) and a district (District of Columbia). For expediting purposes, the researcher sorted and grouped the reports into three groups, Group I, Group II and Group III the deciding factor being membership size of the states.

Group I (small membership under 100) Group II (medium membership 101 - 299) Group III (large membership 300 to 1,487). The official AMRA membership figures of March 31, 1975, was used as the base. Exhibit 1 depicts the distribution.

In approaching the discussion of each facet: the tallies will be depicted in tables pertinent to each topic and will be included both as tables at the point of discussion and as exhibits depicting total picture.

II. Acceptability of six major concerns regarding: BHRD as indicated in the Project Plan:

Table A following depicts the distribution of the tallies made related to the six subjects covered in the above title.

TABLE A	FAVORABLE									UNFAVORABLE			
TASK # 1 - REPORT	10	9	8	7	6	5	4	3	2	1	0	No Resp	TOTAL
B. ACCEPTABILITY OF SIX MAJOR CONCERNS RE: BHRD LISTED IN THE PROJECT PLAN													
1. Patient Care Standards	32	7	1	2	0	0	0	0	0	1	3	1	47
2. Acceptability to Health Care Field	20	6	8	3	1	4	1	0	0	1	3		47
3. Integrity of Medical Record Profession	30	4	5	2	2	0	0	0	0	2	2		47
4. Occupational Levels for Proficiency Tests	17	3	16	2	5	3	2	1	0	1	5	2	47
5. Relevancy to Job Performance	27	6	3	3	1	0	0	0	0	1	4		47
6. Career Mobility	29	4	3	1	1	3	1	0	0	0	5		47
TOTAL	155	30	28	13	10	10	4	1	0	6	22	3	282

Table B demonstrates the same results of Table A regrouped into the Group I, II and III which delineates the voting by the states as grouped by membership.

TABLE B	FAVORABLE				NO RESPONSE				UNFAVORABLE				GRAND TOTAL
TASK # 1 - REPORT	GROUP I	GROUP II	GROUP III	SUB-TOTAL	GROUP I	GROUP II	GROUP III	SUB-TOTAL	GROUP I	GROUP II	GROUP III	SUB-TOTAL	
B. ACCEPTABILITY OF SIX MAJOR CONCERNS RE: BHRD LISTED IN THE PROJECT PLAN													
1. Patient Care Standards	12	16	44	42	1			1		2	2	4	47
2. Acceptability to Health Care Field	12	15	16	43						4		4	47
3. Integrity of Medical Record Profession	12	15	16	43						4		4	47
4. Occupational Levels for Proficiency Tests	11	14	14	39	1		1	2		5	1	6	47
5. Relevancy to Job Performance	12	15	15	42						4	1	5	47
6. Career Mobility	12	16	14	42						3	2	5	47
TOTAL	71	91	89	251	2		1	3		22	6	28	282

1. PATIENT CARE STANDARDS

AMRA sees the primary concern of all project efforts undertaken as supporting and upgrading the quality of patient care through provision of adequate data collection, maintenance and retrieval systems by qualified personnel.

Viewing the Tables A & B regarding this subtopic it is noted that the majority were in favor of the concern related to Patient Care Standards. However, in Table B we find that a state in Group I failed to respond and four states Group II and Group III voted unfavorably towards the philosophy expressed in Task #1 on Patient Care Standards. Of the four voting unfavorably, two voted unfavorably to the total questionnaire; one state presented no explanation; the reason given by another state was to draw attention to the underlying and diffuse discomfort experienced with data submitted to the State Review Committee. The group felt there were omissions in the concerns given. Another state expressed dissatisfaction with lack of definitions for the evaluation scale of 0 - 10.

Additional comments or suggestions on the topic were:

A. Statement presented is a narrow view of the medical record profession. (This state included its definition.)

B. The statement is not a comprehensive enough statement - too general -- more elaboration on "qualified" personnel.

C. Documentation standards should be prime concern as they affect patient care standard. The concern needs to be expanded.

D. Analysis should have included an explanation who is to "adequate" and a definition needed for "Qualified" personnel.

E. Statement is limiting; statement should be stronger.

F. Patient privacy is not mentioned, patient care evaluation is not mentioned; there is more to quality of patient care than "data collection" and "maintenance and retrieval systems".

Although the statement was accepted favorably, it is gratifying to note the fact that the State Review Committees did offer their comments and consensus appears to be that the statement should be amplified and that definitions and explanations be submitted to clarify some aspects.

2. ACCEPTABILITY TO HEALTH CARE FIELD

A. The end products (roles and functions, curriculum guides, and proficiency tests) must be acceptable to the health care field. An Advisory Council was established to advise the Project Staff as to the acceptability of:

   a. The Operations Plan
   b. Methodology
   c. Adequacy of Input Data

d. Definition of Levels, Roles and Functions.
e. Proficiency Test for Credentialing for Specific Levels.

B. Acceptability of level selection for testing to the various health care institution types, e.g. Nursing Homes, Ambulatory Care Centers, Neighborhood Health Centers, etc.

C. Acceptability of outcomes to the Medical Record people in the field.

The Project Staff shall be sensitive to the needs of the various employers of medical record personnel.

Referring to Tables A & B, we again see that there is a very good favorable response, with four states again voting unfavorably, with the two that reacted negatively to the entire Task questionnaire. The two remaining states commented the statement was unclear and it needed to be defined, that it lacked explanation and, therefore, could not be evaluated.

The other comments were:

A. "Acceptability"... could only be achieved if the proficiency tests actually reflected performance levels/performance. The Committee questioned AMRA's commitment and the involvement with BHRD. The state further felt "guarded" about proficiency testing.

B. A group inquired if there was any thought to developing specialties within the Medical Record Field.

C. Wording "Health Care Field" too general and makes it a mediocre concern; another slated "poorly worded".

D. Many not favorable to having different level selection for testing.

E. Question raised as to how will proficiency testing affect requirements for Credentialing medical record professionals by accrediting bodies.

The general feeling expressed to this topic is not favorable to proficiency testing, criticism made of lack of clarity and generality in the presentation.

3. INTEGRITY OF MEDICAL RECORD PROFESSION

In the two prime factors affecting medical record practice (1) health care; (2) data systems, the environment and state of knowledge is changing rapidly. To maintain the integrity of the profession, AMRA must keep pace with these changes. We expect the roles and functions and job performance requirements of medical record practitioners to change; therefore, the mechanism for proficiency testing must provide for updating of the test instruments and even for such radical change as the level of role to be tested.

A regular, periodic review and revision (as needed) of the proficiency tests and mechanisms must be invluded in the plan.

The Tables A & B again indicated the same results in tallying as to the preceding topic. However, excluding the states voting out right unfavorably, the comments were growing in number and were questioning, expressing subconsciously, a fear of the scope or effect of Proficiency testing. There is first evidence of subconscious fear of job-prestige and security voiced in the comment of the possibility of a medical record clerk progressing to an RRA through proficiency tests. A state expressed the thought that entrance to ART/RRA levels must be attained through an educational program, but requirements for ART/RRA be revised to give credit for college credits earned in a school not offering MRA program.

Other statements were:

A. Question whether proficiency can be tested, especially at the professional level.

B. Should add the factor of Management Responsibility in testing.

D. Suggest word "level" be modified or defined as it is being used.

E. Favorable to integrity, not proficiency testing.

Thus, in review of this topic there is expressed fear of status of ART/RRA; proficiency testing difficult and to maintain or have self sustaining is impossible; clarity in definitions needed. Lastly, a state was quite vocal in agreement with statements on integrity but it is a concern of membership, not "AMRA". Each statement was, in essence, challenged indicative of "fear" and thought.

4. <u>AT WHAT PERSONNEL LEVELS SHOULD PROFICIENCY TESTS BE ADMINISTERED?</u>

Is Proficiency Testing appropriate for the:

Administrator Level?
Technician Level?
Transcriptionist Level?
Coding Personnel Level?
Statistical & Analytic Personnel Level?
All Levels?

Tables A & B demonstrate the noticeable decrease of a favorable response at the ten level with an increase in the unfavorable reaction. Unfortunately, the questionnaire provided for a general response to Proficiency Testing and many of the comments endeavored to assign the level at which Proficiency testing would be appropriate. Approximately twenty eight states submitted comments. It is not possible to present a clear factual table. Suffice it to say that nine were totally against any proficiency testing, seven voted favorably for testing for Administrative level; i.e. RRA/ART; six encouraged testing for Transcription, Coding, Statistical and Analytic level, five stated all levels should be tested and the balance were not sure at what level testing should be done. The comments in addition were:

A. AMRA need not be as concerned with this area as with others in the task.

B. Too many variables which need defining.

C. Proficiency testing is an employer responsibility.

D. Proficiency testing does not solve problem of inadequate knowledge.

E. Concern if AMRA will have a role in determining who will be tested and in makeup of test instrument.

F. AMRA should fight proficiency tests.

G. Proficiency tests need to take into consideration need for flexibility.

H. Broader explanation is required; unable to understand wording of this concern.

The above discourse reveals that although voting in the majority was favorable to this topic; the comments indicated differently. Another surprise was number who indicated the testing be done for administrative levels. Again, we note the plea for more explanations of content.

5. RELEVANCY TO JOB PERFORMANCE

The end products must guarantee adequate performance on the job. AMRA has a firm commitment to the concept of proficiency testing, as long as the resultant test actually reflects the job performance needs in the real world-of-work.

Relevancy to job performance was voted for with a slight decrease of unfavorable response.

Again we find varied reactions via comments to the topic, and fewer comments. The gist of the comments is that no test can guarantee adequate performance, one group doubted job performance is actually measurable by proficiency testing. A group queried whether it would be possible to develop a test that will determine a person is both knowledgeable and competent. It was repeated the proficiency testing is an employer's responsibility.

The statement regarding the AMRA firm commitment was questioned. In retrospect AMRA replied to this in the recent issue of Counterpoint.

6. CAREER MOBILITY

The end products must allow for career mobility within the medical records field. A career ladder should be defined to allow for promotion and progression to those who wish to advance in medical records.

The last topic in this portion of the project was again, voted favorable by the majority if one refers to Table A and B. Fewer groups submitted comments. In those that did, the majority felt career mobility was primarily via formal educational processes only; some stated mobility could not be through proficiency alone since it would relegate the profession to a mediocre level. A group

responded stating the field is changing fast, there are changing roles and a career mobility ladder will cause confusion in AMRA as well as other areas. Flexibility was also stressed.

It appears there is not undue concern expressed for career mobility and any progress might be via education. It was stated the medical record field is already limited in mobility.

In concluding the analysis of the first part of Task #1 it should be stated that some states commented on the total portion of the six major concerns and were in agreement in theory with AMRA, but did not agree with wording and specifics in several instances. Again, the opposition to Proficiency Testing and its "implied" threat to the profession and its prestige was varied.

The last item to be included is the percentage table of the acceptability of the six major concerns.

TABLE C

TASK #1 - REPORT

B. ACCEPTABILITY OF SIX MAJOR CONCERNS RE: AHIP LISTED IN THE PROJECT/PLAN

	FAVORABLE			No Response			UNFAVORABLE			
	#	%		#	%		#	%		TOTAL
1. Patient Care Standards	42	89.3		1	2.1		4	8.5		99.9
2. Acceptability to Health Care Field	43	91.4		-			4	8.5		99.9
3. Integrity of Medical Record Profession	43	91.5					4	8.5		99.9
4. Occupational Levels for Proficiency Tests	39	82.9		2	4.2		6	12.8		99.9
5. Relevancy to Job Performance	42	89.3					5	10.6		99.9
6. Career Mobility	42	89.3					5	10.6		99.9

III. PROCEDURES USED BY THE PROJECT

The project staff has undertaken many individual studies to accomplish these tasks.

1. To produce the behavioral objectives bank, they are:

   A. Updating Chapters 1, 2 and 3 of the Pittsburgh Study (1957).

   B. Expanding the Pittsburgh Study to include skilled nursing homes and ambulatory care facilities.

   C. Using a team of fifteen practitioners to prepare listings of skills, knowledge and affect in medical records.

   D. Preparing, using the fifteen practitioners, measurable "objectives" for six occupational levels.

E. Merging the "Pittsburgh Update" functions with the skills, knowledge and affect lists.

When the new Pittsburgh data is available and functions are defined, the objectives will be merged into these functions.

The Staff Medical Record Association will be used as a source of "expert review" for various items.

The project staff found that the scope of this effort was much larger than originally anticipated; therefore, they are investigating the possibility of putting these objectives on a computer file.

2. To produce the Curriculum Design Guide, the project staff members are:

A. Reviewing "curriculum building papers". These papers, funded by the National Institute of Education, were prepared by:

Ralph W. Tyler	Robert Karplus
Ted Hughes	Elliot Eisner
W. J. Popham	M. V. DeValut and L. Anglin
Howard Mehlinger	Larry J. Bailey

B. Documenting the present "state-of-the-art" by:

a) Comparing the following:

- Pittsburgh Study Chapters IV and V
- Essentials
- Actual Programs (6-RRA; 6-ART)

C. Preparing a proposed outline for the design guide for review by the AMRA Academic Division.

Following the instructions the State Review Committees answered the questionnaire and the results show on Table C-1.

TABLE C-1	FAVORABLE									No Resp.	UNFAVORABLE			TOTAL
	10	9	8	7	6	5	4	3	2			1	0	
ACCEPTABILITY OF PROCEDURES	9		6	5	2	4	1	3	0	5		1	7	47

The comments received were by far the most numerous of any submitted per topic heading in Task #1. The comments seemed to cover every item shown in A thru E of 1. Comments were both critical and approving.

A. Regarding the Pittsburgh Study, several replied it should have been included with Task #1, they could not function without it.

B. Many agreed it needed rewriting and updating and should be expanded to include more than skilled nursing homes and ambulatory care facilities and also should be a total evaluation. In direct contrast others stated it was foolish, ridiculous to use and update a 1957 study and questioned why it was used at all.

C. The next group of comments related to the fifteen practitioners and many felt it was not sufficient, several hoped it represented a cross section of the profession, others asked for a definition of the term.

D. Several questioned what were the occupational levels mentioned? They were not identified. Some felt the six levels should be challenged.

E. Several expressed strong opinions that AMRA Staff should not be used as the source of "expert review".

F. Others felt the Curriculum Design Guide was a good idea, but that the information submitted was not helpful and lastly, the E & R Committee should take care of it.

Several commented that they approved of the procedure.

IV. ACCEPTABILITY OF PROPOSED OUTCOMES

The following tables demonstrate the voting both by all State Review Committee followed by the table depicting the reassignment into Groups I, II, and III.

TABLE B	FAVORABLE									UNFAVORABLE		No Resp	TOTAL
B. ACCEPTABILITY OF PROPOSED OUTCOMES	10	9	8	7	6	5	4	3	2	1	0		
1. Delineation of actual roles and functions of personnel at all levels in the field of medical records.	20	7	3	5	3	2	1	0	0	2	4		47
2. Identification of appropriate roles, functions and responsibilities of medical record personnel at all levels	22	3	6	7	2	1	1	0	0	0	5		47
3. Development of a bank of behavioral objectives covering all areas of medical record practice	19	4	2	5	1	4	0	2	0	8	5	5	47
4. Preparation of educational curriculum design guide for use by teachers and other educators	32	4	2	3	1	2	1	0	0	0	2		47
5. Exploration of levels of medical record personnel for which it may be appropriate and feasible to develop proficiency examinations	22	7	3	2	0	1	4	0	0	3	4	1	47
TOTAL	115	25	14	22	7	10	7	2	0	5	20	6	235

TABLE E	FAVORABLE				NO RESPONSE				UNFAVORABLE				Grand Total
B. ACCEPTABILITY OF PROPOSED OUTCOMES	Group I	Group II	Group III	Sub-Total	Group I	Group II	Group III	Sub Total	Group I	Group II	Group III	Sub Total	
1. Delineation of actual roles and functions of personnel at all levels in the field of medical records.	12	14	15	41						5	1	6	47
2. Identification of appropriate roles, functions and responsibilities of medical record personnel at all levels	12	15	15	42						4	1	5	47
3. Development of a bank of behavioral objectives covering all areas of medical record practice	9	16	12	37	3	1	1	5		2	3	5	47
4. Preparation of educational curriculum design guide for use by teachers and other educators	12	17	16	45						2		2	47
5. Exploration of levels of medical record personnel for which it may be appropriate and feasible to develop proficiency examinations	11	16	16	39	1		1	2		5	1	6	47
TOTAL	56	76	72	204	4	1	2	7		18	6	24	235

1. Delineation of actual roles and functions of personnel at all levels in the field of medical records.

It will be noted from the tables that the response to this question was in the majority favorable with six State Review Committees voting unfavorably.

The comments indicated difficulty on the part of the Committee as demonstrated:

A. Delineation of actual roles, and functions is felt by some members to be impossible. They vary from facility to facility and state to state.

B. Too many variables.

C. We lack information to make a judgement.

D. Define the levels.

E. Delineation at all levels would be a gigantic job.

F. Felt actual roles outdated.

The consensus seemed to be that this objective is needed, but the means of accomplishing it is almost impossible.

2. Identification of appropriate roles, functions and responsibilities of medical record personnel at all levels.

The tallies depicted in Tables D and E demonstrate the reaction of the State Review Committees. As they progress into the Task #1 it appears from paucity and type of comments that there is an uncertainty as how to accomplish this and concern is expressed as follows:

A. We don't quite know how to handle this. We feel the only roles are ART and RRA. Based on the "actual roles" of these two positions a general profile of requirements may be developed and in this way the entry level of the professional may be delineated, if this is what is meant by an "appropriate role".

B. It is felt that "Identification" of suggested roles, functions, etc., would be preferable to identifying "appropriate" roles and functions.

C. Emphasis should be on appropriate roles which are more important, too many people are performing below appropriate levels. Emphasis should be on MRA/ART actual and appropriate roles.

D. Who will decide what the appropriate roles and functions are? Wouldn't want the appropriate role listing to limit the scope of roles of RRA/ART.

E. Although in favor, there is a concern that if roles and functions delineated to such an extent could a patient's life be endangered, i.e. a coding clerk in absence of file clerk, refuse to pull a record in an emergency because its "not my job".

F. Could thorough identification of rolls lay the groundwork for unionization of medical record personnel.

There, again we see concerns expressed about the status of the ART and the RRA.

3. Development of a bank of behavioral objectives covering all areas of medical record practice.

Referring to Tables D and E it is noted that we have no response by five State Review groups, also an unfavorable response by five, thus reducing the favorable acceptance by the remainder. The main concern here apparently is lack of understanding as expressed by some replies and the requests for further definition. Some felt it is an overwhelming task, but good if it could be accomplished. Comments were:

A. So many variables; inadequate information at this time.

B. Much discussion about the definition of "behavioral objectives" with no common agreement. Questioned if behavioral objectives would be used for schools or in the profession-at-large. Concern expressed about automation of "behavioral objectives bank" relative to what data would be entered into the computer, what would it be used for and who would have control of the bank.

C. We believe this also to be a very important outcome with considerable practical value to formal academic and continuing education programs. We forsee these objectives serving as a basis for identifying deficient knowledge areas and thereby providing a basis for truly relevant educational endeavors for both initial learning and continuing education.

D. Regardless of who may be responsible for administering proficiency examinations or credentialing examinations, we hope these objectives would be of such quality that they could accurately serve as a basis for constructing rests and assuring validity.

E. One concern regarding the objectives is that a mechanism be established to assure their continual updating; deletion and expansion in order that they truly reflect current medical record practice.

The replies indicate much thought on the part of some, the undue concern prevalent in other subtopics is not prevalent here. Again, it is felt more definitions and information were needed.

4 Preparation of educational curriculum design guide for use by teachers and other educators.

Table D and E graphically portray the most favorable reaction to this particular outcome and the comments were varied.

A. Would like a Curriculum Design Guide for use in in-service education.

B. Project should be done by teachers and other educators after input by ART and RRA.

C. Who would create the guide - the curriculum guide should be an aid and not a mandatory document.

D. Should be a "spin-off" gained by having completed the study. Development of a curriculum does not appear to further the purposes of the study to delineate roles and functions.

E. Worth while; to whom would it be distributed and for what purpose would it be used?

F. Minimal information given.

G. Emphasis should be on roles and functions; preparation of graduate level program for "Health Information Co-ordinator "type personnel needed.

Overall, the Committees were favorably interested and concerned with this outcome and most felt it was an essential need.

5. Exploration of levels of medical record personnel for which it may be appropriate and feasible to develop proficiency examinations.

Although the Tables D and E demonstrate some unfavorable acceptance, and only two nonresponse, the comments were numerous and specific as shown below:

A. Retain only RRA and ART exams; forget other levels of proficiency tests; stiffen requirements in RRA schools; students should be in affiliation sites longer, one year, not six weeks and then become RRA or ART. The RRA program is totally inadequate in education and RRA's out of school totally unable to function. Proficiency tests cannot cover the scope of actual practice.

B. Do not approve of proficiency testing.

C. "Recommendations on feasibility" should be outcome.

D. Before proficiency testing is considered, the current roles of ART and RRA need to be reviewed and evaluated. Concept of proficiency testing as well as consolidation of medical record clerk with medical record professional throughout project is unfavorable. Which agency would develop and administer tests; AMRA - government?

E. Proficiency testing on local levels preferred: explore all levels, but it may not be feasible to develop proficiency exams for all levels.

F. Meaningful proficiency examinations must measure one's skill in the art, and one's knowledge in the science of Medical Record Management. Should have oral as well as written examinations.

G. Proficiency tests should not be developed by level, but there should be one examination which tests for technical skills and knowledges for MRT and MRA. No testing necessary at lower levels.

H. Proficiency testing might be more appropriate on a specialty area such as American Nurses Association now exploring.

I. Why test - what purpose would it serve?

J. We do not understand constraint that only occupation level be examined, as opposed to occupational skills, why not both?

From the above it will be noted that concern is again for RRA and ART; many are opposed to the testing; some in favor and others question who would develop and administer tests - AMRA or the government. A suggestion was offered in statement regarding American Nurses Association endeavor.

With all the topics analyzed, it is urgent now to review the overall comments and outstanding findings concerning the project. The primary item noted by the researcher was the overall cooperative attitude. Unfortunately one cannot say 100% because two State Review Committees replied unfavorably to every single question posed; but that reaction is also interpreted as a "plus" for the membership.

In summation the comments overall dwelt with the following factors:

A. The State Review Committees expressed their concern about lack of clarity, lack of understanding terminology used, the confusion generated, lack of understanding what is expected by AMRA, initiated and compounded by lack of explanations and definitions.

B. The above concern led to a concern of the many interpretations of instructions and material received that could be made by the participants which would lead to questioning the validity of results; would data be statistically valid?

C. Progressing we determine the concern about what will be done with information once it is compiled; who will develop the regulations and licensing exams? Will project affect registration and accreditation exam? Will national credentialing override AMRA's or vice versa. What happens to one who fails an exam? AMRA must have a strong voice in development of tests.

D. A major concern expressed was feedback. Would there be any feedback; would AMRA publish results in a readable, understandable language?

E. Concern was expressed about the Correspondence Course, negatively and and positively with some wanting it retained and others suggesting it be terminated totally.

F. Concern was expressed over association with BNRD and strength or control of BHRD over AMRA.

G. Extreme reluctance to accept proposal was voiced by some.

In conclusion, although apprehension, fear of "unknown", concern for prestige and status of RRA and ART, and fear of loss of professional standing were quite evident in the review, there is a feeling of wanting to rise to the challenge and explore the possibilities, provided AMRA can withdraw if it doesn't seem feasible.

TABLE I. Distribution of AMRA Membership
By States, Protectorate and District

GROUP I (11 States plus Protectorate of Puerto Rico - Small Membership 1 - 100)

Delaware	21	North Dakota	78
Alaska	27	Puerto Rico	85
Vermont	32	New Mexico	89
Wyoming	35	Montana	93
Utah	49		
New Hampshire	53		
Hawaii	54		
Maine	62		

TOTAL: 678

GROUP II (18 States plus District of Columbia - Medium Membership 101 - 299)

West Virginia	106	Kentucky	221
Connecticut	132	Virginia	228
Arkansas	138	New Jersey	231
South Carolina	146	Oregon	251
Washington, D.C.	158	Colorado	253
Mississippi	160	Kansas	265
Nebraska	193	Louisiana	265
Maryland	195	Alabama	267
Arizona	197	Tennessee	290
Iowa	205		

TOTAL: 3,901

GROUP III (16 States - Large Membership 300 - 1,487)

Indiana	303	Ohio	577
North Carolina	314	Pennsylvania	647
Georgia	323	Illinois	798
Wisconsin	414	New York	927
Missouri	418	Texas	980
Minnesota	440	California	1,487
Massachusetts	445		
Washington	445		
Florida	495		
Michigan	556		

TOTAL: 9,570 GRAND TOTAL: 14,149

TOTAL MEMBERSHIP 3/31/75: 14,722

The variance between 14,149 and 14,722 is accounted for by states not participating in the study: Idaho, Nevada, Oklahoma, South Dakota, and foreign membership, and lack of reply from a participating state at time of study anaylsis, totaling 573.

EXHIBIT I

APPENDIX D

SMRA TASK #2

Report on Roles, Functions, Training and Proficiency Tests for Medical Record Personnel. Task #2 Concerning Career Mobility Diagrams for the Profession

Report on
Roles, Functions, Training and Proficiency Tests for Medical Record Personnel. Task #2 Concerning Career Mobility Diagrams for the Profession.

PREFACE

The analysis report of Task 2 follows the pattern of instructions given to the states, with four sections: I - Introduction; II - Analysis of Acceptability and Application of Suggested Career Mobility Diagrams; III - Analysis and Review of Submitted Career Mobility Diagram with reference to Comments on Existing Occupational Levels, a Study and Analysis of Most Common Titles used and a Diagram Portraying Most Common Path Followed for Advancement (if possible); and IV - Analysis of Opinions submitted by the State Review Committees on Proficiency Testing.

I. INTRODUCTION

Roles, Functions, Training and Proficiency Tests for Medical Record Personnel, Task #2 concerning Career Mobility Diagrams for the Profession was approached in a serial fashion endeavoring to follow Bloom's (1) philosophy on Taxonomy of Educational Objectives, which involves knowledge, comprehension, application, analysis, synthesis and evaluation.

The data received from 45 states, the Protectorate of Puerto Rico and District of Columbia, Washington, D.C. was assembled and the results of all the questionnaire were tallied; the career-mobility diagrams submitted by the State Review Committees were individually studied with particular attention to the occupational levels. The input of descriptors reflecting occupational titles, functions were tallied; the questionnaire answers on proficiency testing also tallied and summarized. Lastly, all the input was analyzed to produce data for the benefit of the membership.

To accomplish the above, we initiated our analysis by taking the 47 components represented, and verifying the numerical membership count of each component, utilizing the 3/31/75 official AMRA membership figure of 14,722. The 45 states plus the protectorate of Puerto Rico and the District of Columbia are grouped by membership into Group I (11 states and the protectorate with small membership of 1 to 100), Group II (18 states and the District of Columbia with medium membership of 101 to 299), and Group III (16 states with large membership of 300 to 1,487) The listing of this is shown as Exhibit 1 which contains an explanatory note relative to reconciliation of membership figures. It is interesting to note that Group III actually also has the largest numeric count of members and percentage-wise represents 67.6% of the membership participating in the study. Group II represents 27.5% and Group I represents 4.7% of the membership.

To relate the analysis and findings it will also be necessary to refer to the Career Mobility Diagrams utilized as examples and sent to the State Review Committees in Task #2. These diagrams are Exhibits 2, 3 and 4.

(1) Bloom, Benjamin S., Taxonomy of Educational Objectives, 1956, p. 201 - 207.

II. Analysis of Acceptability and Application of Suggested Career Mobility Diagrams: Table A depicting results of the tallies on the acceptability and application of the suggested Career Mobility Diagrams follow:

CAREER MOBILITY DIAGRAMS

ACCEPTABILITY AND APPLICATION OF CAREER MOBILITY DIAGRAMS

1. Suggested career mobility diagrams, Figure 1
2. Suggested career mobility diagram, Figure 2
3. Suggested career mobility diagram, Figure 3
   TOTALS

TABLE A

Favorable 10	9	8	7	6	5	4	3	2	Total		Unfavorable 1	2	Total	Final Total
4	2	2	3	4	3	4	3	2	27		3	12	20	47
2	2	3	3	4	6	4	5	2	31		1	15	16	47
6	4	5	4	2	5	1	3	1	31		2	14	16	47
12	8	10	10	10	14	9	11	5	89		6	46	52	141

The tally indicates generally a favorable response to the diagrams versus the unfavorable response. The next step was to review the input of three of the states with the largest membership to determine if their input was anywhere consistent with the total input on acceptability of the Career-Mobility Diagrams. The states reviewed were California, New York and Illinois. All were unfavorable to Diagram 1, EXHIBIT 2 (3 out of 20), all were favorable to Diagram 2, EXHIBIT 3 (3 out of 31) and all were unfavorable to Diagram 3, EXHIBIT 4 (3 out of 16). Their input did not distort the total picture.

The next Table B, Analysis of Acceptability and Application of Suggested Career Mobility Diagrams demonstrates an analysis of the same data showing the percentage factor of total input of the 45 states, a protectorate and District. Table B portrays a greater favorable acceptance of diagrams 2 and 3 than for Diagram 1.

TASK #2 CAREER MOBILITY DIAGRAMS

ACCEPTABILITY AND APPLICATION OF CAREER MOBILITY DIAGRAMS

1. Suggested career mobility diagram, Figure 1
2. Suggested career mobility diagram, Figure 2
3. Suggested career mobility diagram, Figure 3

TABLE B

# Favorable		%		# No. Resp.	%		# Unfavorable		%
27		57.4		0	0		20		42.5
31		65.9		0	0		16		34.0
31		65.9		0	0		16		34.0

The following Table C demonstrates an analysis of the tallies of Table A and B synthesizing the initial data into the component Groups I, II and III.

TASK #2 CAREER MOBILITY DIAGRAMS

ACCEPTABILITY AND APPLICATION OF CAREER MOBILITY DIAGRAMS

1. Suggested career mobility diagram, Figure 1
2. Suggested career mobility diagram, Figure 2
3. Suggested career mobility diagram, Figure 3
   TOTALS

TABLE C

FAVORABLE							UNFAVORABLE			
GROUP I	GROUP II	GROUP III	TOTAL		No Response		GROUP I	GROUP II	GROUP III	TOTAL
9	12	6	27		0		3	7	10	20
8	13	10	31		0		4	6	6	16
10	13	8	31		0		2	6	8	16
SM	MED	LGE					SM	MED	LGE	

It is interesting to note that in this grouping of states that Group I, (small membership) with input from 12 components, represents 25% of the total 47; Group II (medium membership) with input from 19 components and represents 40.4%; Group III (large membership) with input from 16 states represents 34.0% of the total 47 components. The gross total becomes 99.9% - remembering one participating state is 48 with no input. For data on actual numbers of members in each group, please refer to EXHIBIT 1.

The State Review Committees were also asked for their comments relative to the diagrams included for their review in Task #2. The researchers would again refer to Table C, repeated below.

TASK #2 CAREER MOBILITY DIAGRAMS

ACCEPTABILITY AND APPLICATION OF CAREER MOBILITY DIAGRAMS

	FAVORABLE					UNFAVORABLE				
	GROUP I	GROUP II	GROUP III	TOTAL	No Response	Group I	GROUP II	GROUP III	TOTAL
1. Suggested career mobility diagram, Figure 1	9	12	6	27	0	2	7	10	20
2. Suggested career mobility diagram, Figure 2	8	13	10	31	0	4	6	6	16
3. Suggested career mobility diagram, Figure 3	10	13	8	31	0	2	6	8	16
TOTALS	SM	MED	LGE			SM	MED	LGE	

TABLE C

In further analyzation of the above table one notes Group I and Group II are most favorable to all three diagrams, while Group III (large) is most evident by their unfavorable reaction to the suggested Career Mobility Diagram 1, Exhibit 2, favorable to Diagram 2, Exhibit 3, and evenly divided in their reaction to Diagram 3, Exhibit 4.

The researcher also reviewed submitted comments relative to the suggested Career Mobility Diagrams Figures 1, 2 and 3, since Task #2 provided for submission of comments on each facet of the task. The reader should be interested in the fact that no comments were received from some states, that unfavorable comments were made as well as favorable. In viewing the distribution in the above tables on Acceptability and Application of the Career Mobility Diagrams, one should show the distribution of no comments by each group for each diagram since it is an indicative factor in the interest and cognizance of the importance of this vital project. This follows in Table D.

TASK #2 CAREER MOBILITY DIAGRAMS

ACCEPTABILITY AND APPLICATION OF CAREER MOBILITY DIAGRAMS

	FAVORABLE					UNFAVORABLE				
	GROUP I	GROUP II	GROUP III	TOTAL		GROUP I	GROUP II	GROUP III	TOTAL	GROSS TOTAL
1. Suggested career mobility diagram, Figure 1	6	6	1	13		1	3	4	8	21
2. Suggested career mobility diagram, Figure 2	4	6	4	14		3	4	2	9	23
3. Suggested career mobility diagram, Figure 3	5	8	2	15		0	3	2	5	20

TABLE D

It will be noted on Table D that 21 states made no comments, favorable or unfavorable relative to Diagram 1.

Favorable comments and suggestions for Diagram 1 consisted of:

1. Diagram is representative of progression in some states.
2. Diagram is appropriate for small hospitals.
3. Diagram allows for progression to MRA .
4. Transcriptionist, Tumor Secretary and Coding Clerk should be on an equal level.

Unfavorable comments or criticism of Diagram 1 were:

1. Diagram not acceptable.
2. Diagram lacks any formal educational requirements for Administrator and Technician.
3. Diagram is inadequate; functions are missing.
4. Diagram is artifical and constraining; there is movement from job to job but not skill to skill.
5. No mobility depicted on diagram.
6. AMRA uses MRA and MRT and does not state whether registration or accreditation are required. AMRA should clarify what they mean.
7. Most unusual for a Ward, Admitting Clerk or Transcriptionist to become a Medical Record Clerk.

In analyzing Diagram 2, Table C indicates a general acceptance of the diagram. However, Table D demonstrates 23 states offered no comments at all. The favorable comments inferred a conscientious study of diagram and were:

1. The education specifications in each level are very representative and good to include in a career ladder.
2. Flexibility should be provided for entry at all levels.
3. Diagram includes functional and job specifications.
4. Diagram demonstrates three ways of becoming an ART equalized through formal education for C.C. graduates.
5. Most appropriate diagram and more interaction occurs than demonstrated.

Unfavorable comments were:

1. Diagram too busy, not acceptable, too complicated.
2. Transcriptionist out of place in the inference there is advancemen through transcription and this is not true.
3. Not realistic for MRT from CC to reach MRA.
4. Levels of supervision not clearly defined.
5. The level of Tumor Registrar was questioned and also "supervisor".
6. Correspondence Course should be omitted from ART. Should be used as in-service educational tool only.
7. Trainee into MR Service is unrealistic. More appropriate to include "trainee" in other areas, i.e. Admitting Clerk, etc.

Referring to Table D relative to Diagram 3, Exhibit 4, it is noted 20 states failed to make any comments. Many of the favorable comments were consistent

with those made for Diagram 1. Additional comments were:

1. It was the best diagram; most suitable; most acceptable and represented progress in the state.

The unfavorable comments revealed:

1. The difference between Basic Clerk and File Clerk is questioned.
2. The diagram is inadequate, not acceptable, impossible, too general and not realistic.
3. Diagram confused roles and functions and lacked room at top for growth.
4. Diagram not open ended; medical record practitioner's capabilities not limited to the administration of a department.
5. Implies proficiency exam and does not take into consideration educational requirements.

Some of the comments made were referrable to all three diagrams. They are:

1. None of the diagrams were acceptable because they confused the level of education with the level of responsibility.
2. All three diagrams seemed to confuse roles and functions with professional standing.
3. None of the diagrams are applicable to our state as there is no mobility in our state between ART and RRA.
4. Diagrams were too "hospital" oriented rather that "profession" oriented.

In retrospect, the Tables depict the acceptance and applicability of the diagrams as indicated by State Review Committees. The review of comments were indicative of the thinking of the participants. The reaction on the part of some was strong and critical. It is noteworthy so many states failed to comment on this facet of Task #2. Is it lack of interest, time or knowledge which resulted in the paucity of comment?

III. Analysis and Review of Submitted Career Mobility Diagrams.

The State Review Committee groups were instructed to describe Career Mobility as it exists in their particular state with submission of a career mobility diagram depicting mobility including all occupational levels; the most common titles used; and the most common path followed for advancement. Using the submitted diagrams and all data submitted as attachments as an operational base, the researcher approached the analysis by sorting the submitted diagrams into the three groups, then ranking them according to the number of occupational levels demonstrated and studying the same. The researcher then compiled a list of all descriptors input from diagrams and data in attachments . Since Task #2 contained three suggested diagrams for study and reference, (Exhibits 2, 3 and 4) two questions came to mind in preliminary review. Did any of the states submit more than one diagram? Did any utilize the suggested sample diagrams?

Table E below answers both inquiries:

Did States Use Suggested Charts as Guides?

Small (12)		Medium (19)		Large (16)	
Yes	No	Yes	No	Yes	No
2	10	4	15	1	15

Did States Send More than 1 Chart?

Small (12)		Medium (19)		Large (16)	
Yes	No	Yes	No	Yes	No
3	9	2	17	4	12

The sorting into Groups I, II and III and subsequent designation within groups of submitted diagrams resulted in the following ranking of states with occupational levels:

TABLE F. NUMBER OF OCCUPATIONAL LEVELS OF STATE GROUPS

GROUP I		GROUP II		GROUP III	
Levels	States	Levels	States	Levels	States
1	(Entry Level on all Diagrams)				
2	Alaska Utah	3	Kansas Oregon	3	Texas Illinois
4	Alaska Utah Hawaii North Dakota Montana	4	Oregon Virginia	4	Missouri Washington (State) Georgia
5	Delaware Vermont North Dakota Montana	5	Arizona Nebraska Tennessee Alabama Louisiana	5	Wisconsin Michigan Florida Ohio
6	Wyoming New Hampshire Maine Puerto Rico (Protectorate)	6	Mississippi Colorado Iowa Maryland	6	North Carolina Massachusetts Indiana California
7		7	South Carolina Arkansas	7	Minnesota New York Georgia
8		8	New Jersey District of Columbia	8	Pennsylvania New York
9	New Mexico	9	Connecticut Kentucky	9	

In review of the above table we find that in Group I, the diagrams of four occupational levels is the preferred or common pattern, in Group II, the five occupational level diagrams is the prevalent pattern and in Group III, the 6 occupational levels were considered the preferred although one state in the 5 level group stated flatly there was no progression pattern and did not submit a diagram but did submit a list of titles. These were arranged in a fashion to intimate a 5 level scale.

The appearance of states more than once in a group is due to submission of one diagram representative of small hospitals, one of medium hospitals, one of large hospitals within the state; in other cases one is representative of mobility as it exists; one may be as "proposed"; one may be representative of "job" and another based on education.

Another factor which is evident in looking at Table E pertains to the levels which range from entry level (1) through 9 (top echelon). Surprisingly in Group I representing small states, one state demonstrated 9 occupational levels.

In the analysis of the diagrams, the levels of occupation, the entry positions, the descriptors utilized, educational requirements, functions performed, types of mobility, diversification of diagrams and conversely, rigidity of diagrams, the position of RRA and ART were studied with suprising factors emerging. After review of Levels two and three, to refrain from boring the reader, concentration will be on the most preferred levels, emphasis will be on the detail in Group I since Group II and III have evinced the same factors and new factors only will be brought into the report when feasible. Reference to Levels will be found on EXHIBIT 6 (Table F).

TWO LEVEL DIAGRAM:

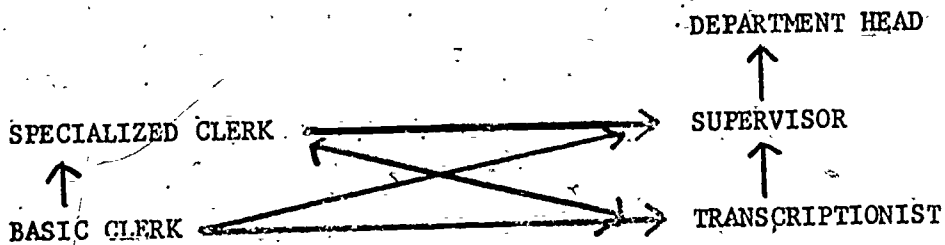
In Group I, two states showed a 2 level mobility. In the case of a state, altho they showed a 4 level diagram, they grouped 3 functions into one via comment as being performed by one and the same person. The functions were filing, transcription and medical record clerk functions. What would be a composite title for entry? Of interest, the director, (RRA/ART) and usually an ART, is also the Tumor Registrar and also does the coding. In the other state represented, one diagram showed only 2 levels for small hospitals that of Medical Record Clerk and progression to ART.

THREE LEVEL DIAGRAMS:

In Group II the lowest number of levels was 3 and in reviewing the 3 level diagrams in two states, we find one utilized the clerk as entry position. In another personnel may enter as a Basic Clerk or a transcriptionist. A state demonstrated an unusual pattern of lateral or horizontal, vertical and diagonal movement or progression with Basic Clerk progressing laterally to transcriptionist or vertically and diagonally to specialized clerk, thence laterally to Supervisor and vertically to the department head. The diagram follows:

DIAGRAM I

SAMPLE OF A SUBMITTED CAREER MOBILITY DIAGRAM



In Group III, in the three level group, we have two states, neither of which utilized a common means of entry. One utilized the medical record clerk and progression was vertical only with stressing of education, second level being the ART, third level RRA. The RRA required degree plus examination. The second state was mobile in that they utilized the clerical skill as entry via Clerk I, II, III: Clerk Typist 1, 2, 3. Medical Secretary/Transcriptionist/Stenographer 1, 2, 3. This was first diagram showing transcriptionist on first level.

FOUR LEVEL DIAGRAM:

The next level for consideration is the group of diagrams utilizing four levels of mobility/progression. In Group I it is the preferred diagram with five states submitting data.

The first glaring problem in analyzation of 5 state input refers to descriptors, positions or job titles at entry level and functions utilized at entry levels. There is a lack of unity in all three areas. This problem continues throughout the analysis of diagrams. The problem relating to descriptors or titles because of its prevalence necessitates referring reader to EXHIBIT 5 which is an alpha list of all descriptors input by the State Review Committee Group. EXHIBIT 7 Tables A through I depict the Frequency and Utilization of Occupation Descriptors at levels 1 through 9 in diagrams submitted by groups. The subject of descriptors enters into discussion throughout analysis.

Returning to Group I, considering level one as an entry level, the five states included in this analysis utilized 5 descriptors for entry; that of Clerk-Typist, Health Record Clerk, Basic Clerk, File Clerk, and Admission and Filing Clerk. The five encompass a job title, a position title and a function title. One state combined 2 functions at entry level, admission and filing and another state depicted two distinct positions at entry level, Basic Clerk and File Clerk.

In looking at all the 12 reporting states in the "small" group, 14 descriptors were used at entry level remembering some states had more than one diagram. The four level diagram of a state utilized seven descriptors in the clerk entry level which were termed medical record or clerical functions. One questions if the seven functions represent seven steps of mobility? If so, diagram does not indicate this and if so, the state would not fall into 4 level diagram. Lack of uniformity again comes to the foreground.

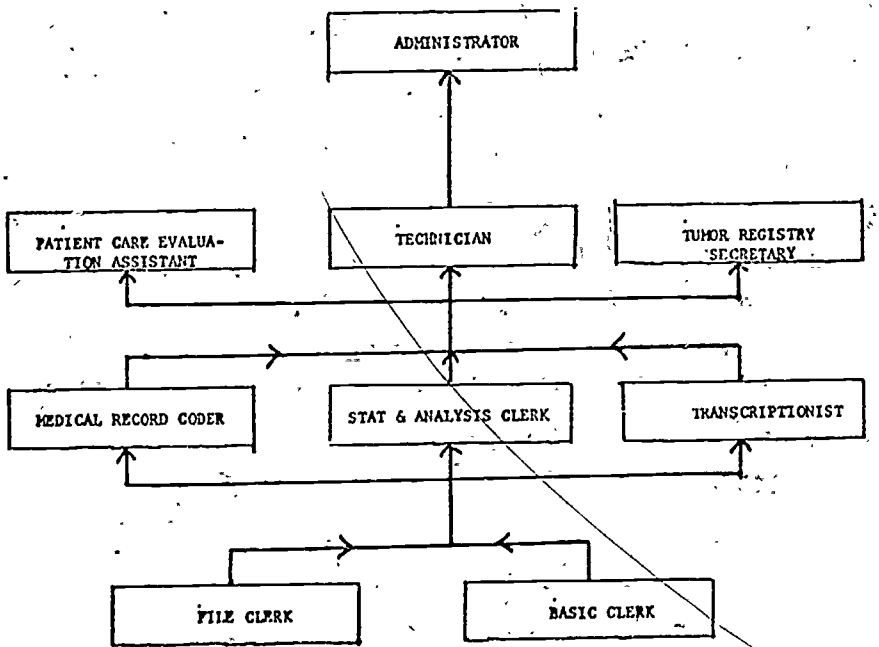
Movement from entry (first level) to second level in the group being analyzed two factors stand out. The ART and the technician make their first appearance

and there is also unity with position and entrance of the transcriptionist at this level. OJT enters on this level. The term "technician" raises another consideration. Is this an ART - or is the technician status based on experience and proficiency? Later it will be interesting to note frequency and levels at which technician/ART appear. Referring to EXHIBIT 7 Table B indicates the problem of titles and functions of all reporting states at this level.

The fourth level in the preferred group of five shows a lower frequency of descriptor input, in that there are 12 descriptors utilized. There is a trend towards professionalism and administration. In looking at the five in this analyzation, we find three states utilize the term administrator at the fourth level; the title RRA is utilized by two states and makes its first appearance.

In summarization of the five in Group I, it is unique a state with 54 members demonstrates the most mobile, diverse interesting career diagram. It is noteworthy that at the entry level, we encounter varied descriptors; that ART and technician appear on second level and a medical record clerk is the third level in another state. The title technician and RRA as used do not indicate any educational background or requirement, yet another state specified education and exam as prerequisite, O.J.T. is stressed. The fourth level demonstrated emphasis on administration in this group. Perhaps a pattern will show as we move into the phase on Proficiency, Education. A diagram is reproduced here as being most adaptable to this group; as an example of mobility, variety of functions and advancement.

SAMPLE OF SUBMITTED CAREER MOBILITY DIAGRAM
Four Levels



In analysis of Group II four level diagram summarization only as to outstanding facets is necessary. The diagram of one state is very rigid and confining as far as mobility is concerned; new progression via MRT-MRA programs and titles infer change from occupation/proficiency needs to education. Flexibility was evident in other diagrams.

Analyzing Group III's four level diagram lack of unity in titles at all four levels was pronounced. One state utilized "responsibility" as basis for mobility.

In summation of four level diagrams of all groups it would appear standardization of job titles, delineation of functions performed within a job title structure would be advantageous. The U.S. Department of Labor publishes a Dictionary of Occupational Titles. Does AMRA need a glossary pertinent to the Medical Record profession, with cross referencing to eliminate falling in with the saying "A rose by any other name is just as sweet".

FIVE LEVEL DIAGRAMS:

Emphasis will be on Group II (with 5 states) as it was the preferred number of levels for the medium sized states.

Outstanding in Group I was need for standardization and unity of titles. There was lateral and vertical mobility demonstrated. The third level of this input showed unity for transcriptionist. One state also demonstrated utilization of most commonly recognized titles.

Group II had input from five states. However, two of the five utilized Figures I of Task #2. Even tho this was the preferred number of levels, there was little uniformity.

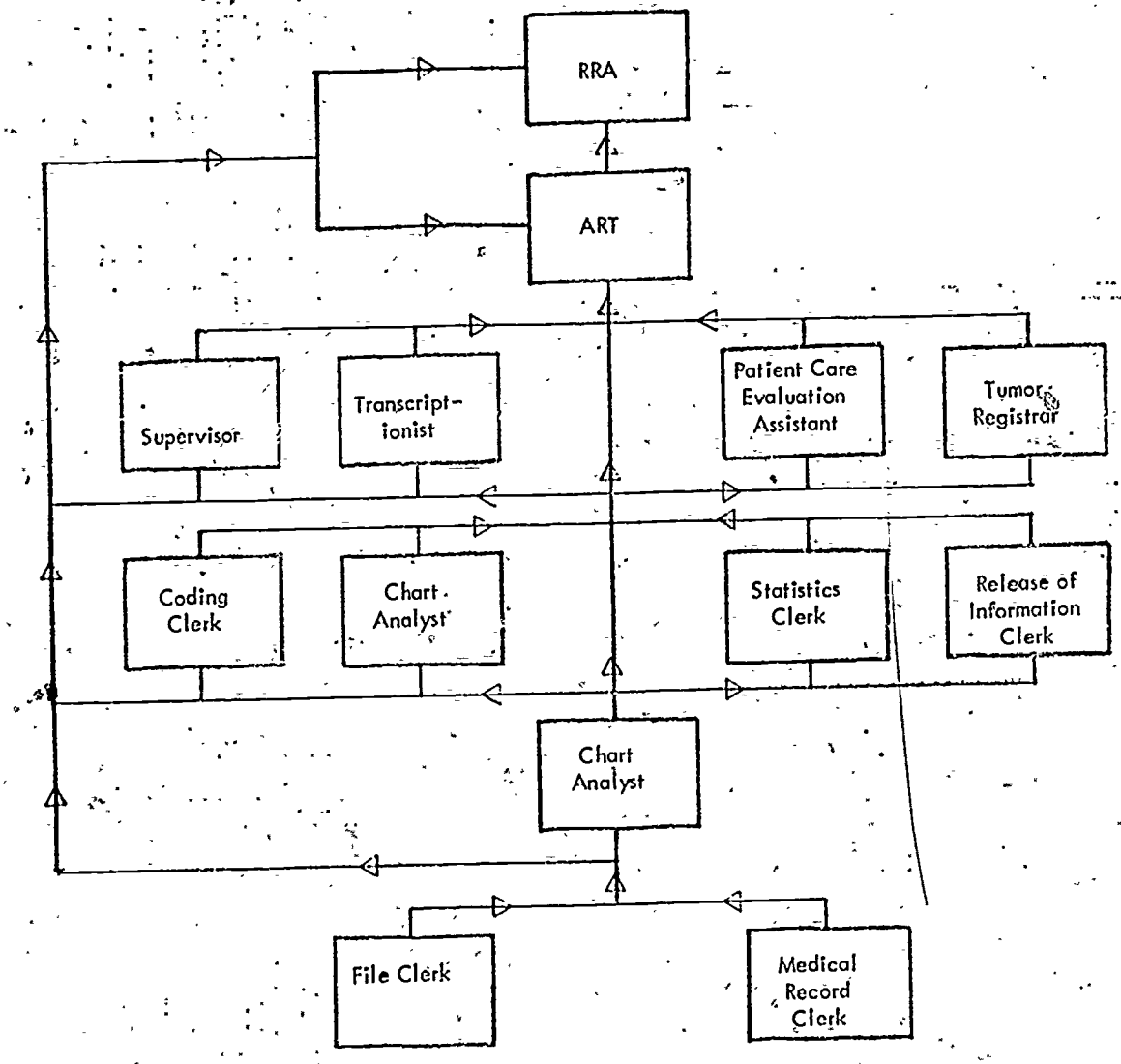
One state in Group III revealed ranking is justifiable based only on salary; a state was very emphatic in stating they were interested in employee's competency. Their diagram is "skilled learning" oriented with entrance of clerical skills (filing, etc.). The same state emphasized RRA and ART's operate currently at each of the skill levels demonstrated. Also, distinction between RRA and ART was not well drawn in reality and not shown on diagram. The same diagram stresses need of terminology to advance to third level.

In summation of 5 level diagrams, it becomes more evident standardization of titles, functions and relation of function to a title is essential. The duties performed at each level - indicate lack of uniformity. Can this be rectified? No diagram was outstanding enough to warrant utilization as a suggested model.

SIX LEVEL DIAGRAM:

In Group III, the six level diagram was preferred. Analysis revealed the diagram of a state was unique in terminology of functions and mobility. The diagram stressed vocational training, inservice training, academic education as a means of progression. Management wise it introduced staff and line levels. However, the unusual terms removed it from consideration as a model of great utilization. The most representative diagram is presented.

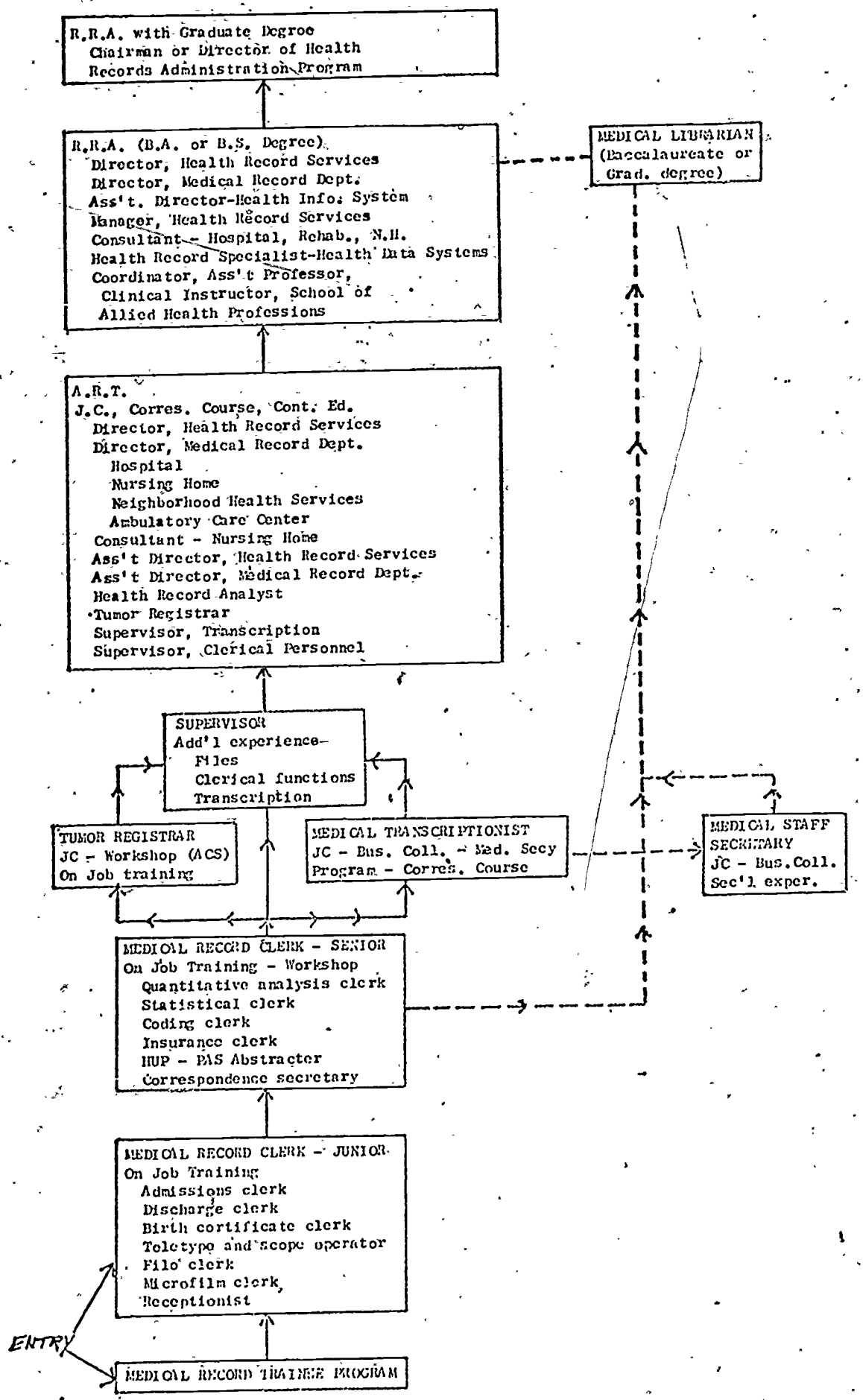
SAMPLE OF SUBMITTED CAREER MOBILITY DIAGRAM
Six Levels



Other cogent factors noted in other 6 level diagrams in Group I and II was the increase of positions at the entry level, but also requiring education to advance to the next level. The six level diagrams became more complex. There are more opprotunities for advancement. The position of ART and RRA is uniform in majority of diagrams. Graduate studies became evident at this level as a means of opportunity.

The balance of submitted diagrams included levels of 7, 8 and 9. Understandably these diagrams were even more complex. Some diagrams were non-flexible, rigid in mobility. One diagram demonstrated the confusion existing - listed job categories and transferred them to occupational level. The diagram of one of the large states utilized only 8 levels, but the outstanding factor was number of opportunities at each level, functionally, the utilization of OJT, workshops, and formal education. It was a well planned diagram and follows as a reference. It is to be noted in the diagram the term "Medical Librarian" is used. Lastly, the diagrams in the 7, 8 and 9 level portrayed RRA's and ART's in Administrative capacities with some groups requesting advanced education, but also displaying potentials beyond the hospital structure.

SAMPLE OF SUBMITTED CAREER MOBILITY DIAGRAM
Eight Levels



Having referred to the various exhibits with the input at the levels 1 through 9, the researcher would now refer the reader to EXHIBIT 8 which depicts the greatest frequency distribution of descriptors found in EXHIBIT 7, Tables 1 - 9, gleaned from requested diagrams. The reader's study of this precludes necessity of any comments as it is self-explanatory.

Before concluding the analyzation of submitted diagrams it is necessary to make reference to the most dominant factor demonstrated throughout the above discourse - that of descriptors or job titles.

EXHIBIT 5 is an alpha listing of all the descriptors input and totalled 299 items. EXHIBIT 8 shows a finalized recap of the most prominently utilized descriptors at the various levels from submitted diagrams. EXHIBIT 9 - Tables I through XII depict the frequency of 299 descriptor's input from all data received.

The summation of the titles used, shown in EXHIBIT 9 - Table I through XII reveals that where titles are consistent, there is agreement. This is clear in the designation of a File Clerk, an Admissions Clerk, or a Ward Clerk. However, looking at the ART, we find an expansion from a basic clear cut frequency of 15, to a total of 53; RRA expands from 18 to 59; the Medical Record Clerk expands from 23 to 42 and the Transcriptionist from 26 to 56. To account for the variables it is necessary to refer to EXHIBIT 9 - Table VIII a and b - which again displays the multitudinous terms utilized. The group of "variables" represent personnel with titles that could be classified anywhere from clerk to ART/RRA.

Looking at the ART, it is noted the individual functions anywhere from "specialist", "non'specialist", Utilization Review Co-ordinator, supervisor, "Medical Audit", Assistant to Director of Department to Department Head. The RRA likewise spanned supervisor - consultant, assistant, educator, Department Head, Director of Administrator. Reviewing the above, a factor to consider is how many ART's are from the Correspondence Course only; how many have Associate Degrees; how many RRA's are from educational programs; how many earned the title because of experience? One cannot answer those questions from data submitted.

Referring to EXHIBIT 9 - Tables V and VII (the Tables displaying Medical Record Clerks and Clerks) it is evident that functions and titles vary - should some of the Clerks be Medical Record Clerks? Are the functions performed in Medical Record Department under Administration of Medical Record Administrators, or are functions performed elsewhere?

Another table of interest is the one headed "Variables" EXHIBIT 9 - Tables VIIIa and b totalling 103 - primarily inferring administration, but some inclusions could be interpreted as "Clerical". This category includes entries difficult to interpret relative to requirements for function, or whether mobility is possible. The titles represent "people", "job" or "occupation" titles. Complicating the problems is the EXHIBIT 9 - Table XII entitled "Functions Only". Lastly are the Tables entitled "Education" EXHIBIT 9 - Table IX, "Secretarial" EXHIBIT 9 - Table X, and Supervisory Categories, EXHIBIT 9 - Table XI. All of the Tables and analyzation of diagrams submitted accentuates the existing confusion, the lack of consistency, lack of uniformity or agreement as to what a descriptor conveys in relationship to functions. The evidence of so many entry titles, basically clerical, which continue to 2nd and 3rd levels; the spread of administrative/management descriptors for ART's, spanning second level through the ninth level, and RRA's from third

level through ninth level and is a source of concern, even though the researcher is cognizant this occurs primarily in the smaller installations. The question still prevalent throughout is "What actually are the functions, responsibilities of the ART-RRA or Medical Record Clerk? Are they clerical at some levels, technical, managerial or administrative at other levels? This needs an answer. What are functions of the Medical Record Clerk?

If queried whether the submitted diagrams were solely functional or occupational - was there any clear picture demonstrated, the reply would of necessity be in the negative due to confusion existing complicated by titles. It does not seem feasible to attempt to present a sample diagram depicting titles or functions, or mobility at this time. It is felt consideration might be given to compilation of a glossary by AMRA; a glossary containing standarized titles, the preferred titles, with definitions relating to functions performed in relationship to the title. Such a glossary could pertain as well to Patient Care Evaluation, audits and all new ramifications and developments increasing in the Health Care Field.

With the above accomplished it might then be possible to present a Career Mobility Chart reflecting either job titles or functional titles only. Provision for mobility might be reflected via OJT, formal education and proficiency testing.

IV. Analysis of Opinions of the State Review Committees Submitted on Proficiency Testing:

The last portion of Task #2 involved a questionnaire seeking the consensus of the State Review Committees regarding advancement in medical record field. The options were:

1. Provision should be made for advancement in the medical record field.
2. Alternative provision should be made for advancement to the mrt level other than through the current educational programs & accreditation exams.
3. Alternative provision should be made for advancement to the mra level other than through the current educational programs and the registration exams.
4. Acceptability of competency based proficiency exams as an alternative for advancement to the mra level.
5. Acceptability of competency based proficiency exams as an alternative for advancement to the mra level.

The following Table G demonstrates the reaction of the participants.

OPINIONS OF THE STATE REVIEW COMMITTEES:	Favorable 10	9	8	7	6	5	4	3	2	No Resp.		Unfavorable 1	2		TOTAL
1. Provision should be made for advancement in the medical record field	30	6	3	1	2	0	0	0	1	1*		0	3		47
2. Alternative provision should be made for advancement to the art level other than through the current educational programs & accreditation exams.	4	1	3	1	1	3	2	2	1	0		5	26		47
3. Alternative provision should be made for advancement to the ara level other than through the current educational programs and the registration exams.	8	2	2	1	1	2	3	2	1	0		3	20		47
4. Acceptability of competency based proficiency exams as an alternative for advancement to the art level.	6	1	3	2	0	2	1	1	3	1*		3	24		47
5. Acceptability of competency based proficiency exams as an alternative for advancement to the ara level.	5	1	1	1	0	3	1	1	1	1*		5	27		47
TOTAL	53	11	12	6	4	10	5	6	9	3		16	100		235

TABLE G

* No check in Favorable Column

It is noted that the majority answered favorably to question that provision should be made for advancement in the medical record field, but when suggestions were presented as a means of accomplishing this, and when queried as to acceptability of competency based proficiency exams, the answers were in the majority negative to any suggestions.

Analysis of the voting by tallying the answers into the assigned Groups I, II, and III depicts the results on Table H which follows:

OPINIONS OF THE STATE REVIEW COMMITTEES:	FAVORABLE Group I	Group II	Group III		No Resp.		UNFAVORABLE Group I	Group II	Group III		GROSS TOTAL
1. Provision should be made for advancement in the medical record field	13	17	14		1		0	1	2		47
2. Alternative provision should be made for advancement to the art level other than through the current educational programs & accreditation exams.	8	4	4		0		4	15	12		47
3. Alternative provision should be made for advancement to the ara level other than through the current educational programs and the registration exams.	9	10	5		0		3	9	11		47
4. Acceptability of competency based proficiency exams as an alternative for advancement to the art level.	8	5	6		1		4	13	10		47
5. Acceptability of competency based proficiency exams as an alternative for advancement to the ara level.	8	3	4		1		4	15	12		47
TOTAL	45	39	33		3		15	53	47		235

TABLE H

It will be noted that in replying unfavorably to the five questions, Group II (Medium) was most prominent in the negative replies.

The comments also must be reviewed to complete the picture and are reported according to topics listed:

1. Provision should be made for advancement in the medical record field.

   Although this was favorably voted upon, the replies indicated advancement should not be possible for Clerk to become RRA via passing proficiency test; another replied "yes" but it should be on an educational level.

   Unfavorable comments were that the proposal offers no true possibility for alternative response and another state inquired if this were a "cost justification item" stating further advancement comes through ability and motivation.

2. Alternative provision should be made for advancement to the mrt level other than through the current educational programs & accreditation exams.

Comments were varied consisting of those in favor of maintaining accreditation exam as a requisite; the accreditation exam must be common denominator for all ART's; others suggested dropping accreditation and registration exam for those who complete training in approved MRT/MRA schools and alternative would be passing a proficiency exam with educational requirements.

The feeling exists that current educational programs and exams are minimum under which a person should be accredited.

Some felt there were ample opportunities now for ART's and enough alternatives now; correspondence course is damaging image . Should be an in-service tool only.

Proficiency testing would place us back where we were prior to curriculum for registration and accreditation.

Some were outspoken in feeling ART and RRA should be attained only via formal educational programs; and these should be strengthened as well as more academic programs to broaden scope of functions and experience.

3. Alternative provision should be made for advancement to the MRA level other than through the current educational programs and the registration exams.

The point was made many ART's unable to go to college and are able to perform and do as RRA's - and there should be provision for advancement, and queried doing this via Correspondence Program.

Some felt the proposal was acceptable if it did not lower standards of the profession.

Lateral movement between professions was recommended - and this could be via proficiency test - but still would require a Baccalaureate degree, and registration exam as requirement.

Several suggested strengthening existing programs; very few recommended experience in lieu of education.

4. Acceptability of competency based proficiency exams as an alternative for advancement to mrt level.

Here the majority stated the exam would be acceptable only if educational requirements still required and experience no substitute for college degree in other professions.

Some felt it would undermine current professional standards, and therefore, unacceptable. Also, exams could not be comprehensive enough to test all facets needed.

5. Acceptability of competency based proficiency exams as an alternative for advancement to the mra level.

The comments to the above query were about identical or consistent to concerns expressed in Item 4 above.

In the overall comments related to Task #2 that were received, we find:

a. A fear that RRA's will become over abundant and proficiency testing is a threat to the profession.

b. Proficiency testing will lower standards.

c. Proficiency testing is all right for clerical work, but not for the ART's/RRA's.

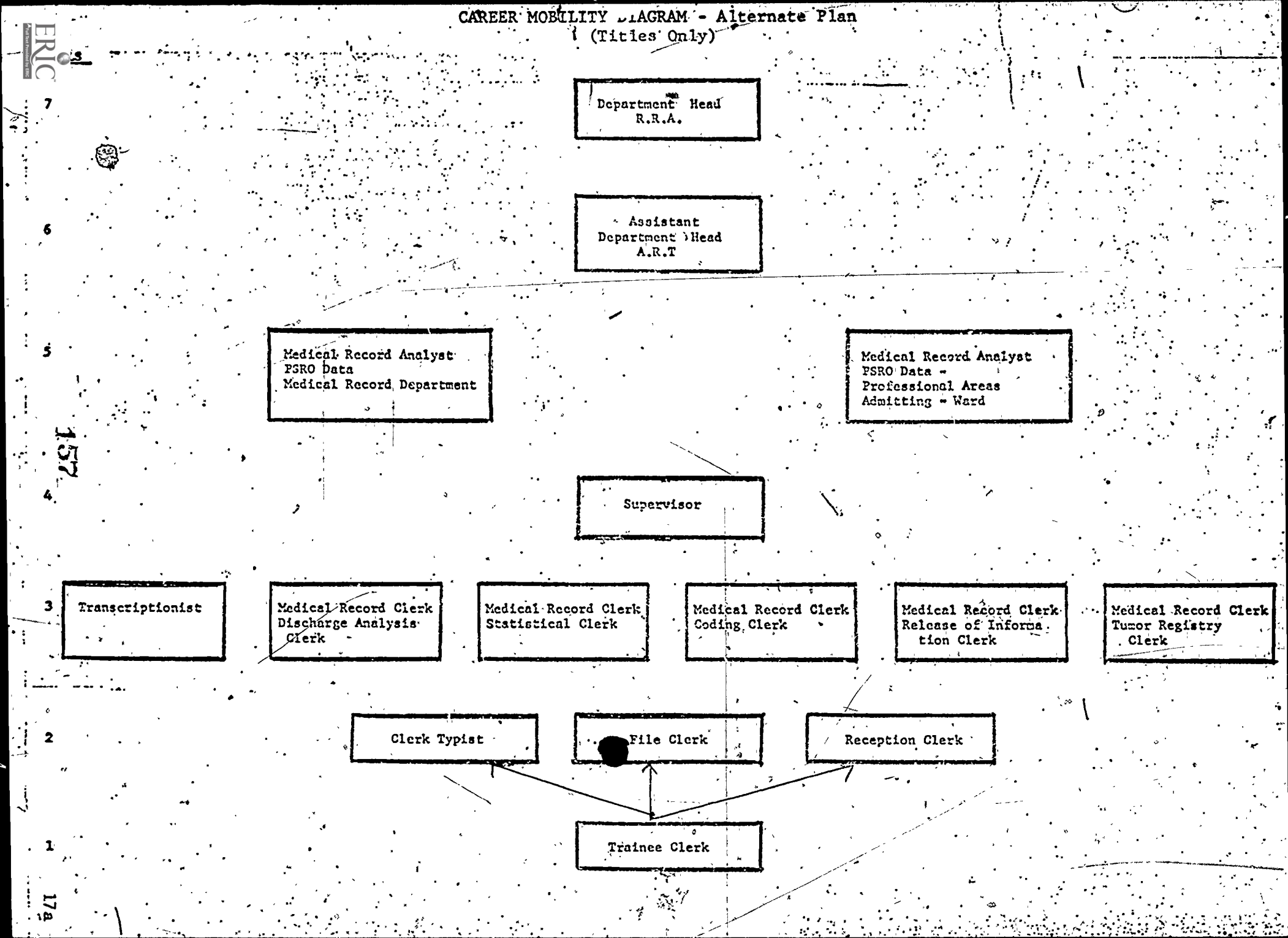
d. Overall consensus is that ART/RRA requirements are mandatory: education must be a prerequisite to advancement; otherwise, the profession is turning to an "apprentice" status.

e. Some express the idea that in addition to formal education, there should be a longer internship prior to registration.

f. A thought was expressed that a degree other than in medical record science should be a means for mobility.

Although recommendations were made relative to a glossary of titles, the career-mobility diagrams and having reviewed all the data, endeavoring to synthesize it as much as possible, the researcher presents the following career-mobility diagram as an "alternate" plan for your review and consideration.

CAREER MOBILITY DIAGRAM - Alternate Plan
(Titles Only)



Career Mobility Diagram - Alternate Plan incorporating OJT - Proficiency Testing and Formal Education

LEVELS

7 — Department Head R.R.A.
(Bacc. Degree - M.R.A. School + Exam.)
(Bacc. Degree + Guided Preparatory Data + Prof. Exam.)
(Experience + Technical Educ. (Assoc. Degree) + Prof. Exam.

6 — Assistant Department Head A.R.T
(Assoc. Degree - M.R.T. School + Exam.)
(C.C. + Exam.)
(J.C. + Prof. Test)

5 — Medical Record Analyst PSRO Data Medical Record Department
Medical Record Analyst PSRO Data - Professional Areas - Admitting - Ward

4 — Supervisor (Experience - OJT - C.C.)

AMRA CC And/Or Proficiency Tests And/Or Jr. College

3 — Transcriptionist
Medical Record Clerk Discharge Analysis Clerk
Medical Record Clerk Statistical Clerk
Medical Record Clerk Coding Clerk
Medical Record Clerk Release of Information Clerk
Medical Record Clerk Tumor Registry Clerk

Jr. College - AMRA - CC - Secy Course -
In Service Training Programs: Medical Terminology: Basic Med. Record Data: Forms, Record Flow.

2 — Clerk Typist
File Clerk
Reception Clerk

1 — Trainee Clerk

In conclusion, the Task #2 analysis was a most challenging and interesting assignment. The researcher would present the following excerpt from a current piece of literature which serves to make us aware of our critical situation:

(2) H. Poor Occupational Mobility

> Poor patterns of career mobility for their graduates will decrease the attractiveness of schools of allied health. With some exceptions, students who choose training in an allied health profession tend to be locked into their specialty. There are a few possibilities for lateral movement into another specialty and limited opportunities to move to a higher level of skill. Even the beginning student recognizes that after a brief period of advancement, salary increases become insignificant, and professional status rises little with experience. School educating health practitioners, as well as their graduates, face the hard reality that the highest salary and highest esteem tend to be given to those members of the health "team", who are farthest removed from the actual delivery of services. He or she who teaches, administers, or consults usually receives the greatest rewards and recognition. The prospect of 10-20 years at approximately the same level of function, compensation and prestige probably will become increasingly unsatisfactory for many students embarking on lifetime careers. This may increase the difficulty of recruiting well qualified students.

One can now pose the question: Membership, which path should we follow? Should we adhere to our current philosophy and concept gained through hard dedicated pursuits with final recognition as a profession, or shall we continue to maintain our professional standards and also accept the fact we must consider providing for a proficiency alternative rather than lose control of our profession, our educational processes and exams? We are being challenged with the legislation developments and the decision is not one that can be held in abeyance until we are ready to accept the current legislation, philosphies and changing times. The "Changing Time" is now.

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(2) "The Future of Schools of Allied Health", A Report on an Insitute, Apr 24-26, 1974, page 17.

TABLE I. Distribution of AMRA Membership
By States, Protectorate and District

GROUP I (11 States plus Protectorate of Puerto Rico - Small Membership 1 - 100)

Delaware	21	North Dakota	78
Alaska	27	Puerto Rico	85
Vermont	32	New Mexico	89
Wyoming	35	Montana	93
Utah	49		
New Hampshire	53		
Hawaii	54		
Maine	62		

TOTAL: 678

GROUP II (18 States plus District of Columbia - Medium Membership 101 - 299)

West Virginia	106	Kentucky	221
Connecticut	132	Virginia	228
Arkansas	138	New Jersey	231
South Carolina	146	Oregon	251
Washington, D.C.	158	Colorado	253
Mississippi	160	Kansas	265
Nebraska	193	Louisiana	265
Maryland	195	Alabama	267
Arizona	197	Tennessee	290
Iowa	205		

TOTAL: 3,901

GROUP III (16 States - Large Membership 300 - 1,487)

Indiana	303	Ohio	577
North Carolina	314	Pennsylvania	647
Georgia	323	Illinois	798
Wisconsin	414	New York	927
Missouri	418	Texas	980
Minnesota	440	California	1,487
Massachusetts	445		
Washington	445		
Florida	495		
Michigan	556		

TOTAL: 9,570 GRAND TOTAL: 14,149

TOTAL MEMBERSHIP 3/31/75: 14,722

The variance between 14,149 and 14,722 is accounted for by states not participating in the study: Idaho, Nevada, Oklahoma, South Dakota, and foreign membership, and lack of reply from a participating state at time of study anaylsis, totaling 573.

EXHIBIT I

PROPOSED CAREER LADDER

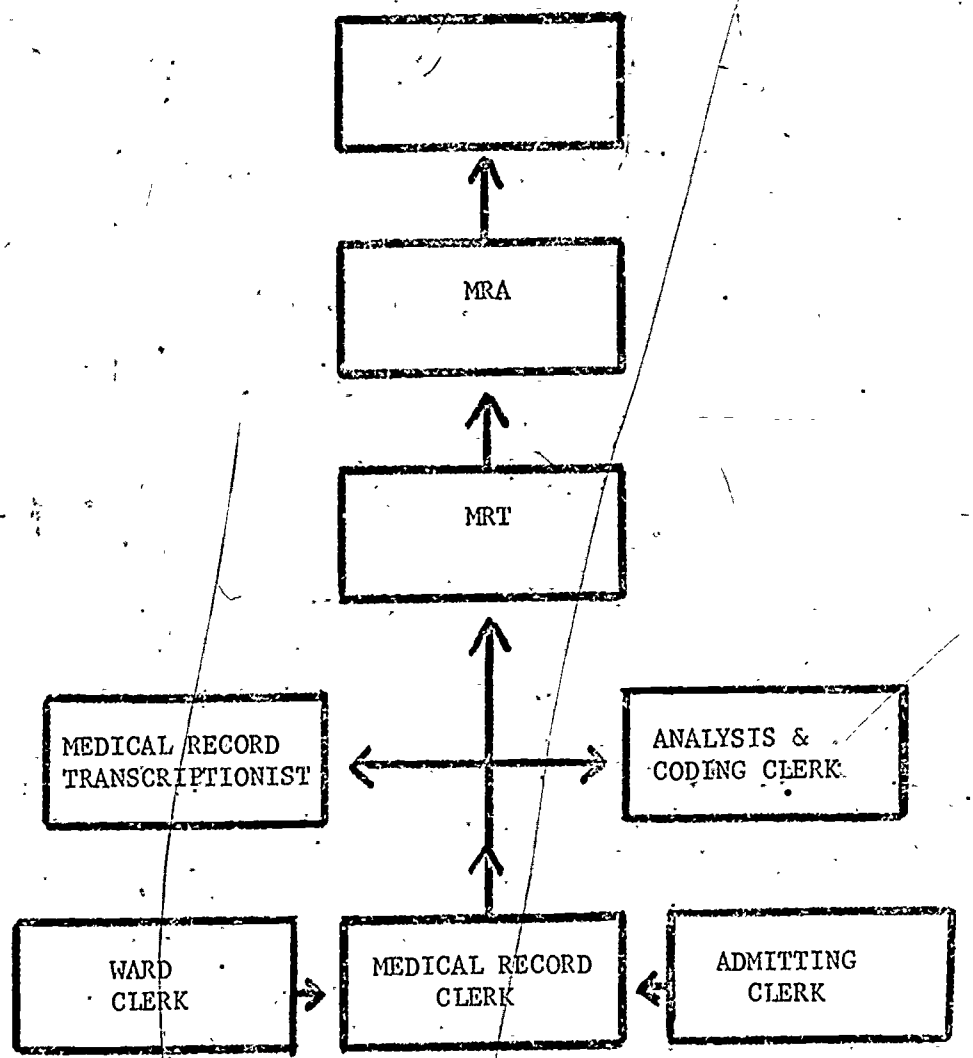


EXHIBIT 2

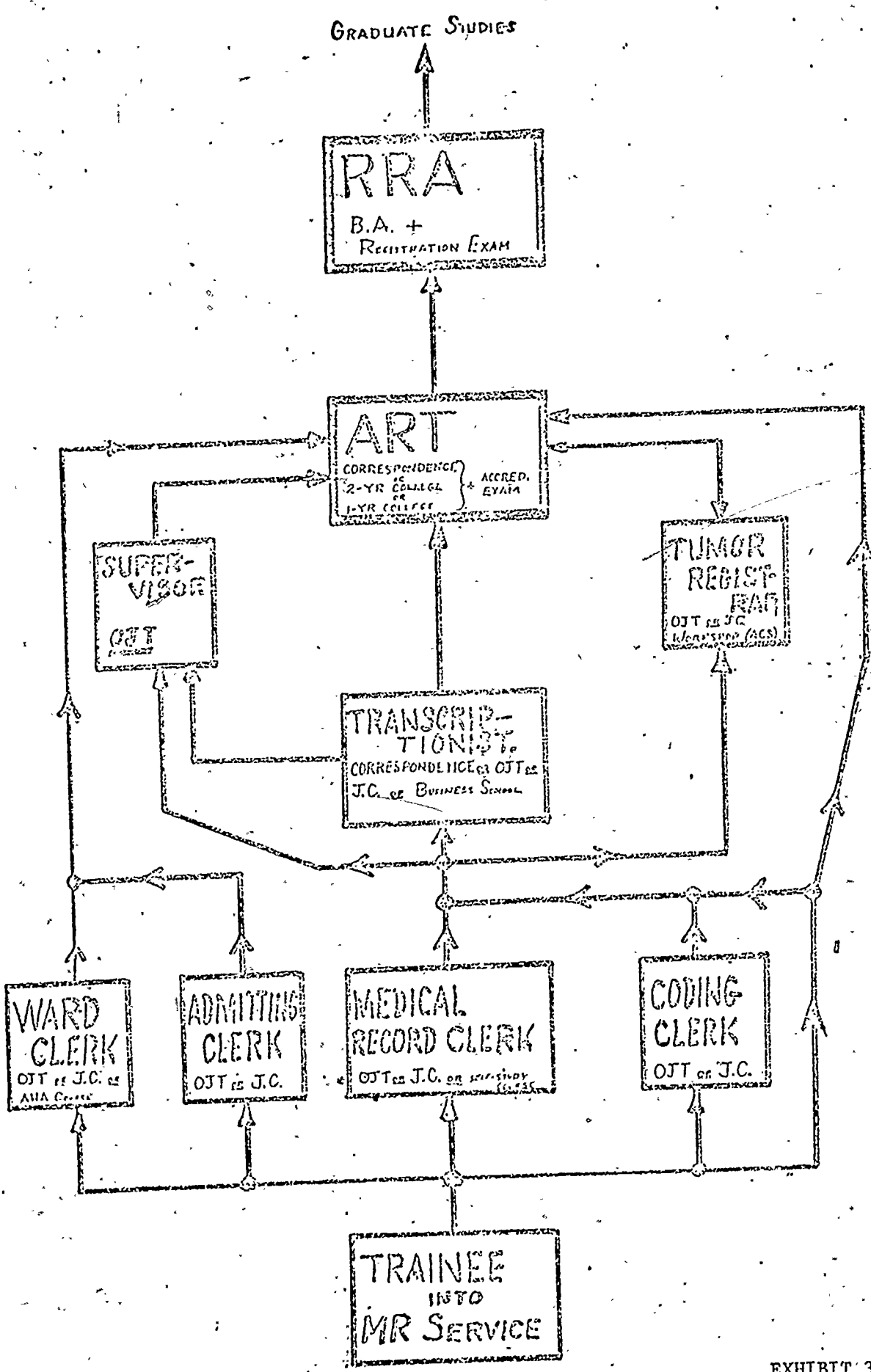
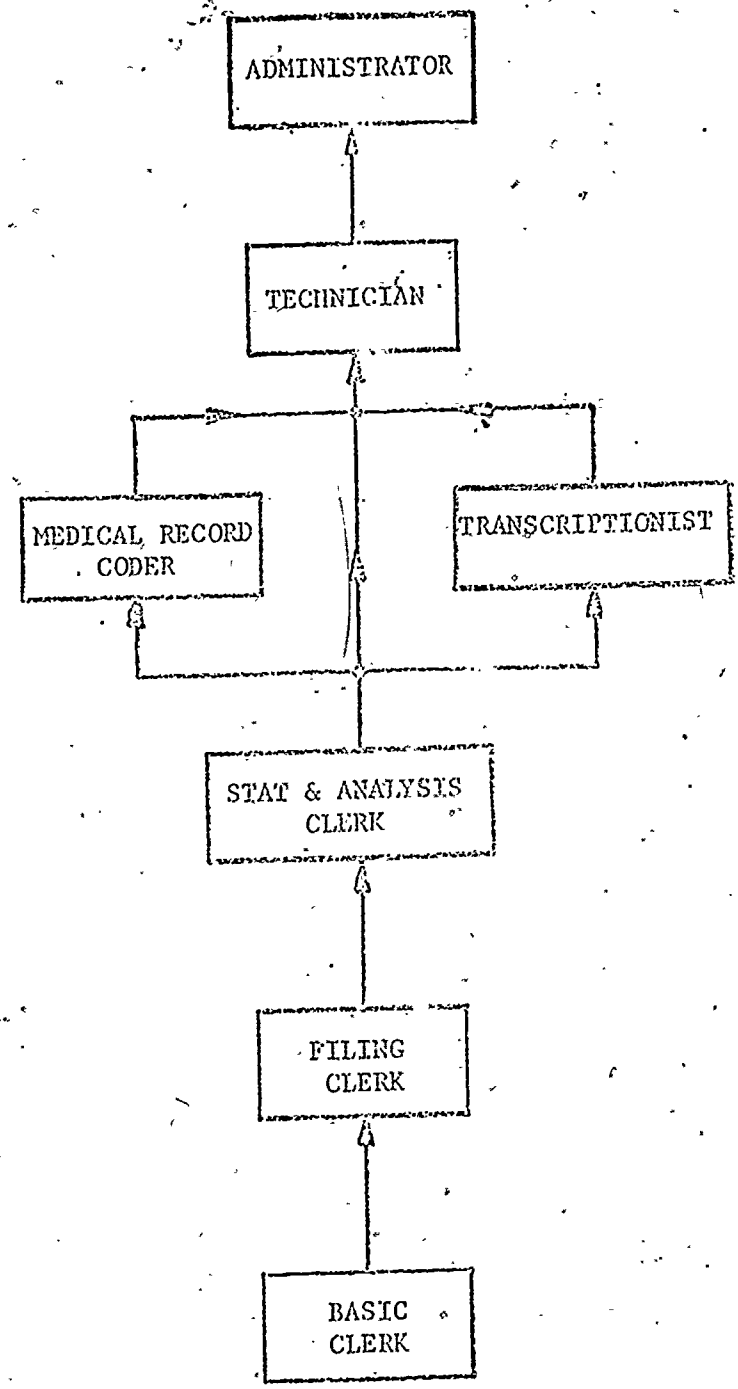

GRADUATE STUDIES
RRA
B.A. +
REGISTRATION EXAM
ART
CORRESPONDENCE OR 2-YR COLLEGE OR 1-YR COLLEGE
+ ACCRED. EXAM
SUPER-VISOR
OJT
TUMOR REGIST-RAR
OJT OR J.C.
TRANSCRIP-TIONIST
CORRESPONDENCE OR OJT OR J.C. OR BUSINESS SCHOOL
WARD CLERK
OJT OR J.C. OR AHA COURSE
ADMITTING CLERK
OJT OR J.C.
MEDICAL RECORD CLERK
OJT OR J.C. OR SECRETARY
CODING CLERK
OJT OR J.C.
TRAINEE INTO MR SERVICE

EXHIBIT 3



PROPOSED CAREER LADDER

EXHIBIT 4

Descriptors Utilized by State Review Committees in

Task #2 Concerning Career-Mobility Diagrams for the Profession

Abstract Clerk
Abstract Clerk (PAS)
Abstractor
Administrator
Administrator or Director (RRA/ART)
Administrator (RRA - Bacc. Degree & Register)
Administrator (Past BA & Certif. Prog.)
Admission and Discharge Clerk
Admission and Filing Clerk
Admission Clerk
Admission Clerk (OJT)
Admissions Officer
Admitting Clerk
Admitting Clerk (OJT & Acad.)
Admitting Clerk (OJT & JC)

AMRA Course or JC
Analysis and Coding Clerk
Analysis and Coding Clerk (OJT)
Analysis Clerk
ART
ART (Assoc. Degree)
ART (Assoc. Degree/CC & Accred. Exam)
ART (CC - Coll. - JC & Accred.)
ART, Medical Audit
ART, (or ART Correspondence Student)
ART (Staff/Line)
ART, Supervisor
Assembly Clerk
Assistant Administrator
Assistant (ART)

Asst. ART (Assoc. Degree & Accred.)
Asst. Dept. Director
Asst. Dept. Head
Asst. Dept. Head RRA
Asst. Dept. Head RRA/ART
Asst. or Assoc. Director (RRA/ART)
Asst. Director
Asst. Director (RRA/ART)
Asst. Director, Health Information System (RRA)
Asst. Director, Health Research Services (RRA)
Asst. Director, Medical Record Dept. (RRA)
Asst. Utilization Review Coordinator
Audit Coordination
Audit Coordinator
Basic Clerk
Basic Clerk (OJT)

Basic Filing Clerk
Birth Certificate Clerk
Birth Registrations
Cancer Program Secretary
Cancer Registry Secretary
Chairman/Director of Health Records Administration Program (RRA with Graduate Degree)
Chart Analysis Clerk
Chart Analyst
Chief Clerk
Chief, Medical Administrative Services-Agency
Chief, Medical Record Administration-Gov't Agency
Clerical Skills
Clerk
Clerk 1, 2, 3
Clerk Trainee

Clerk Typist
Clerk Typist 1, 2, 3
Clinic Clerk
Clinic Secretary
Coder
Coder/Tumor Registry
Coding
Coding and Abstracting
Coding and Abstracting Clerk
Coding and Abstracting Function
Coding and/or Abstracting Technician
Coding Clerk
Coding Clerk (OJT-JC)
College Student
Concurrent Review Coordinator

Consultant
Consultant, N.H.
Consultant, RRA, Rehab., Hospital N.H.
Consulting
Coordinator, Asst. Professor, Clinical Instructor (RRA)
Correspondence/Medicolegal
Correspondence Clerk
Correspondence Secretary
Correspondence Student
Correspondence Supervisor
Curriculum Development
Data Analyst
Data Management
Data Processing
Data Specialist
Department Administration

EXHIBIT 5a

Department Director
Dept. Director (RRA)
Departmental Employee
Department Head
Dept. Head (RRA)
Dept. Head (RRA/ART)
Director
Director/Asst.
Director, Health Record Services (RRA)
Director, Medical Record Department
Director, Medical Record Dept. (RRA/ART)
Director, Medical Record Services
Director of Educational Program (RRA)
Director or Manager (MAA or ART)
Director, RRA
Director, RRA/ART

Discharge Analyst
Discharge Analysis Clerk
Discharge and Stat. Clerk (OJT)
Discharge Clerk
Discharge Clerk (Chart Analyzer)
Discharge Clerk (OJT)
Disease Registry Function
Educational Program
Education
Exam - ART
Exam - RRA
Executive Secretary
Federal & State Data Systems or Other Gov't Positions
File Clerk
File Clerk (OJT)

Filing
Filing Clerk
Filing Clerk (OJT)
Filing Retrievers
Fiscal Management
Float Clerk
Floating/Relief Clerk
Formal Education
General Clerk
Graduate Studies
Graduate Studies (MBA, MHA)
Health Data Systems, RRA
Health Information Coordinator (Masters or Doctors Degree)
Health Record Analyst
Health Record Analyst (ART - Assoc. Degree & Accred.)

Health Record Clerk
Health Record Specialist
Health Researcher
Hospital Researcher
Hospital Committee Liason
HUP - PAS Abstractor
Indexing
Indexing Clerk
Individual
Information Analyst/Agency or Corporation
Inservice Training
Instructor
Insurance and Correspondence
Insurance Clerk
Insurance Correspondence Secretary
Insurance Secretary (OJT/JC)

Jr. College Student
Legal Clerk
Management
Manager, Health Record Service, RRA
Master Index Clerk
Medical Audit
Medical Audit Asst.
Medical Audit Clerk
Medical Care Abstractor
Medical Data Analyst
Medical Information
Medical Librarian
Medical Record Administrator
Medical Record Clerk
Medical Record Clerk "A", "B", "C"

Medical Record Clerk - Basic
Medical Record Clerk, Jr. (OJT)
Medical Record Clerk, (OJT - Acad.)
Medical Record Clerk, OJT - JC)
Medical Record Clerk (Other)
Medical Record Clerk, Sr.
Medical Record Clerk, Sr. (OJT)
Medical Record Coder
Medical Record Consultant - Gov't Agency Corporation
Medical Record Department Secretary
Medical Record Director (RRA, ART)
Medical Record Employee
Medical Record Technician
Medical Record Trainee
Medical Record Trainee Program

EXHIBIT 5b

Medical Record Transcriptionist
Medical Secretary
Medical Secretary/Transcriptionist/
Steno 1, 2, 3
Medical Staff Secretary
Medical Staff Secretary (JC Bus. Sch.)
Medical Transcriber
Medical Transcription
Medical Transcriptionist
Medical Transcriptionist I, II
Medical Transcriptionist (JC/Bus. Sch.
Med. Secretary Program, CC)
Medicare Clerk
Medicolegal Secretary
Microfilm Clerk
Micro filming
MRA
MRA (Program)

MRT
MRT (Corres. Program)
MRT School Director
MRT School Instructor
MRT - Vocational Training
Non-Hospital Program Development
Non-Specialist ART
Non-Specialist Clerk
Nosologist
Other Employees
Patient Care Audit Function
Patient Care Evaluation Asst.
Patient Care Evaluator
Patient Index

Patient Index Clerk
PAS Clerk
Performance Evaluation
Photo Copy Clerk
Processing Clerk
PSRO Audit
PSRO Current Review
Quantitative Analysis Function
Quantitative Analysis Clerk
Q.A.P. Coordinator
Receptionist
Receptionist (OJT-JC)
Record Analysis - Statistics
Record Control
Release of Information
Release of Information Clerk

Research
Research Associate
Research Clerk
Research Project Planning & Development
Research Studies
Section Supervisor
Senior Medical Record Clerk
Shift Supervisor
SNOMed Coder
Specialist ART
Specialist Clerk
Specialized Clerk
Staff Counselling
Stat. & Analysis
Stat. & Analysis Clerk
Stat. & Analysis Clerk (JCAH or OJT)

Statistical & Audit Coodinator
Statistical Clerk
Statistician
Statistics
Statistics & Coder
Statistics Clerk
Stat./QA
Stenographer
Supervisor
Supervisor, ART
Supervisor (ART-OJT)
Supervisor, Clerical Persons
Supervisor, Medical Records
Supervisor, Medical Transcription
Supervisor of Clerks

Supervisor, OJT
Supervisor OJT, JC, Bus. Sch.
Supervisor, RRA/ART
Supervisor, Transcription
Technician
Technician (CC/Bus. Sch.)
Teletype Operator
Terminology
Trained Applicant
Trainee in Medical Record Department
Trainee into Medical Record Service
Transcrip
Transcription
Transcription Clerk
Transcription Supervisor
Transcriptionist

EXHIBIT 5c

Transcriptionist (Bus. Sch./CC)
Transcriptionist (CC/OJT/Bus. Sch.)
Transcriptionist (OJT - Acad.)
Tumor Reg.
Tumor Register
Tumor Registrar
Tumor Registrar (OJT, JC, AHA Wkshp)
Tumor Registry
Tumor Registry Clerk
Tumor Registry Clerk/Registrar
Tumor Registry Secretary
Tumor Secretary (OJT - Acad.)
Unit Clerk
Unit Supervisor
Utilization Coordinator
Utilization Review

Utilization Review Clerk
Utilization Review Coordinator
Vital Statistics Clerk
Vocational Teaching
Ward Clerk
Ward Clerk (OJT)
Ward Clerk (OJT, JC & AHA)
Ward Clerk (OJT, or Acad.)

EXHIBIT 5d

TABLE F. NUMBER OF OCCUPATIONAL LEVELS OF STATE GROUPS

GROUP I		GROUP II		GROUP III	
Levels	States	Levels	States	Levels	States
1	(Entry Level on all Diagrams)				
2	Alaska Utah	3	Kansas Oregon	3	Texas Illinois
4	Alaska Utah Hawaii North Dakota Montana	4	Oregon Virginia	4	Missouri Washington (State) Georgia
5	Delaware Vermont North Dakota Montana	5	Arizona Nebraska Tennessee Alabama Louisiana	5	Wisconsin Michigan Florida Ohio
6	Wyoming New Hampshire Maine Puerto Rico (Protectorate)	6	Mississippi Colorado Iowa Maryland	6	North Carolina Massachusetts Indiana California
7		7	South Carolina Arkansas	7	Minnesota New York Georgia
8		8	New Jersey District of Columbia	8	Pennsylvania New York
9	New Mexico	9	Connecticut Kentucky	9	

EXHIBIT 6 (Table F)

TASK #2 Concerning Career - Mobility Diagrams for the Profession
Input from the State Review Committees
Frequency and Utilization of Occupation Descriptors - LEVEL I

Group 1		Group 2		Group 3	
Admission - Filing Clerk OJT	1	Admission Clerk	3	Admission Clerk	3
Admission Clerk (OJT)	2	Analysis and Coding Clerk	1		
Basic Clerk	4	Basic Clerk	2	Basic Clerk	1
Clerk Typist	1	Basic Filing Clerk	1	Clerical Skills	1
Discharge Clerk OJT	1	Clerk	1	Clerk	2
File Clerk	3				
File Clerk OJT	1	Clerk Trainee	1	Clerk 1, 2, 3	1
Insurance Clerk	1	Executive Secretary	1	Clerk Typist 1,2,3	1
Medical Records or Clerical Functions	1	Filing	1	File Clerk	1
Abstracting		File Clerk	8	Filing Clerk	2
Admission		Health Record Clerk	1	Individual	1
Assembly		Medical Audit Clerk	1	Medical Record Clerk	4
Chart Analysis		Medical Record Clerk	3	Medical Record Employee	1
File		Medical Record Clerk (Other)	1	Medical Record Trainee - Training Program	1
Insurance		Other Employees	1	Medical Secretary Stenographer	1
Tumor		Trainee into Medical Record Service	2	Non-specialist Clerk	1
Medical Record Clerk - Admitting & Discharge	1	Transcriptionist	2	Trainee Medical Record	1
Medical Record Trainee	1	Tumor Registrar	1	Ward Clerk	1
Microfilm Clerk	1	Supervisor	1		
Trainee in Medical Records	1	Ward Clerk	3		
Ward Clerk	1				

EXHIBIT 7 Table A

TASK #2 Concerning Career - Mobility Diagrams for the Profession
Input from the State Review Committees
Frequency and Utilization of Occupation Descriptors - LEVEL 2

GROUP 1		GROUP 2		GROUP 3	
Abstracting Clerk	1	Admitting Clerk	2	Admitting Clerk OJT/Acad	2
Admitting Clerk	1	AMRA Course - JC	1	Analysis Clerk	1
ART	1	Analysis Clerk	1	ART (Jr Coll & Exam; CC/Coll Prog)	2
Coding Clerk	4	Analysis-Coding Clerk	2	Birth Certificate Clerk	1
Discharge Clerk	1	ART	1	Correspondence Clerk	1
Discharge Analyst	1	Basic Clerk	2	Correspondence Student	1
Discharge - Stat Clerk OJT	1	Coding Clerk	3	Chart Analyst	1
File Clerk	2	Correspondence Clerk	1	Discharge Analysis Clerk	1
File Clerk OJT	1				
Insurance Secretary (OJT-JC)	1	Discharge Analyst	1	Filing Clerk	1
Medical Record Clerk	2	Filing	1	General Clerk	1
Medical Record Coder	1	Indexing	1	Jr College Student	1
Medicare	1	Medical Record Clerk	6	Medical Record Clerk Medical Record Clerk (OJT/Acad)	1 2
Medical Transcriptionist	2	Medical Record Transcriber	1	Medical Record Clerk Jr - OJT (Penn)	1
Receptionist OJT	1	Medical Secretary	1	adm, disch, teletype, microfilm,	
Stat & Analy Clerk	2	Medical Transcription	1	recep, birth certificate, file	
Stenographer	1	Microfilming	1	Medical Record Technician	1
Technician	1	Specialized Clerk	1	Specialist Clerk	1
Transcriptionist	2	Statistical and Analytical Clerk	1	Supervisor	1
Ward Clerk	1	Stat Clerk	1	Terminology	1
		Supervisor	1	Transcription OJT/CC	1
		Transcriptionist	3	Tumor Registry OJT	1
		Tumor Registry Clerk	2	Ward Clerk (OJT/Acad)	1
		Ward Clerk	2		

EXHIBIT 7 Table B

TASK #2 Concerning Career - Mobility Diagrams for the Profession
Input from the State Review Committees
Frequency and Utilization of Occupation Descriptors - LEVEL 3

Group 1	
Admission and Discharge Clerk	1
ART (CC/Coll & Accred)	1
Asst Admin	1
Coding/or Abstract Technician	1
Department Head (No RRA)	1
Insurance Correspondence Clerk	1
Medical Audit	1
Medical Record Clerk	1
Medical Record Coder	1
Patient Care Evaluator	1
Statistical-Analytical Clerk	2
Supervisor - Clerks	1
Supervisor - Transcription	1
Technician	1
Transcriptionist	4
Tumor Registrar - Transcrip - Coder	1
Tumor Registry Secretary	1

Group 2	
Admission and Discharge Clerk	1
Analysis - Coding Clerk	1
ART	2
Birth - Death Certificate Clerk	1
Clerk Typist	1
Coder	2
Department Head	1
Insurance & Correspondence	1
Medical Record Clerk	2
Medical Record Technician	1
Medical Transcriptionist,	1
MRT	1
MRT - Prog/Corres. Prog	1
MRA - Prog	1
RRA	1
Statistis and Coder	1
Stat. .A.	1
Transcriptionist	6
Utilization Review	1

Group 3	
Administrator	1
Analysis Clerk	1
Chart Analyst	1
Coding Clerk	4
Coding and Abstracting Clerk (Acad)	1
College Student (starts) (ART Assoc Deg)	1
Correspondence Clerk	1
Health Record Analyst	1
Medical Record Clerk (Sr) (OJT)	1
Coding, corres, Ins, HUP - PAS Abs Clk	
Quant Analy Ck, Stat Clk	
MRA	1
Medical Transcriber Voc Trng	1
Medical Transcription	1
Release of Information Clerk	2
RRA (Degree and Exam)	2
Senior Medical Record Clerk	1
Statistics	1
Stat Analy Clk	1
Stat Clerk	2
Supervisor OJT	1
Transcription	1
Transcription OJT/Acad)	1

EXHIBIT 7 Table C

TASK #2 Concerning Career - Mobility Diagrams for the Profession
Input from the State Review Committees
Frequency and Utilization of Occupation Descriptors - LEVEL 4

GROUP 1		GROUP 2		GROUP 3	
Administrator	3	ART	2	Administrator	1
ART (CC/Coll and Exam)	2	ART - Medical Audit	1	ART	2
				ART (U.[illegible]. Coord Transcrip) (Stat Chart Analy)	1
Assistant (ART)	1	Assistant Department Head	1	Bachelor's Degree	1
Coding Clerk	1	Coding Clerk	1	Coder	1
Director (Head of Department - RRA/ART) (Tumor Abstractor and Coder)	1	Consultant	1	Consultant	1
		Department Director/Head	1	Medical Information Clerk	1
Medical Record Coder	2	Exam - ART	1	Medical Record Coder	1
MRT	1	Exam - RRA	1	Medical Staff Secretary (JC/Bus Coll)	1
RRA	1	Health Researcher	1	Medical Transcriptionist (JC Bus Coll, Med Sec'y Prog CC)	1
Supervisor (OJT)	2	Medical Record Clerk "A" (Filing, Patient Index, "Float" Clerk) (Clinic Clerk, Registry Clerk)	1	Non-specialist - ART	1
Transcriptionist	2	MRA	1	Patient Care Evaluator	1
Tumor Registrar (OJT)	2	Medical Record Administrator	1	RRA/ART (Formal Education)	1
		Medical Record Coder	1	Specialist - ART	1
		Medical Transcriber	1	Supervision	1
		Record Analysis - Stat	1	Supervisor - Transcription	1
		Record Control	1	Transcription	1
		RRA	1	Transcriptionist	1
		Stat - Anal	1	Tumor Registrar (OJT, JC, WKshp, Acs)	1
		Supervisor - ART (OJT)	1	Tumor Registry	1
		Supervisor	3		
		Transcriptionist	2		
		Tumor Registrar	2		
		Tumor Registry	1		

EXHIBIT 7 Table D

TASK #2 Concerning Career - Mobility Diagrams for the Profession
Input from the State Review Committees
Frequency and Utilization of Occupation Descriptors - LEVEL 5

GROUP 1	
Administrator	1
ART	2
Department Head (RRA)	1
MRA	1
RRA (Bachelor's Degree and Exam)	1
Statistics	1
Technician (CC/Bus School)	2

GROUP 2	
Analysis Clerk	1
Assistant Administrator	1
Assistant ART (Assoc Degree & Accred)	1
ART	3
Coding & Abstracting	1
Coding Clerk	1
Correspondence Clerk	1
Director/Mgr/RRA/ART	1
Director - Educ Prog	1
Discharge Data Clerk	
Health Record Analyst - ART (Assoc Degree and Accred)	1
Medical Record Clerk "B" (Disch Analy, Microfilming, Float Clerk)	
RRA	2
Statistical Clerk	1
Supervisor	1
Supervisor RRA/ART	1
Transcription	1

GROUP 3	
ART	1
ART - Staff/Line	1
ART - Supervisor	1
Health Record Analyst	1
Management	1
RRA	2
RRA - Educ Dept Dir	1
Supervisor (OJT)	1
Supervisor (Files, Clerical Functions)	1
Technician	1
Tumor Registry	1
Unit Supervisor (ART)	1

TASK #2 Concerning Career - Mobility Diagrams for the Profession
Input from the State Review Committees
Frequency and Utilization of Occupation Descriptors - LEVEL 6

GROUP 1	
Administrator	1
Administrator/Director (RRA/ART)	1
RRA (Degree and Exam)	2
Transcriptionist	1

GROUP 2	
Administrator, RRA (Degree and Exam)	1
ART	1
Health Record Analyst	1
Medical Record Clerk "C" (Birth Certificates, Clerk Transcription, Utilization Review Clerk, Reception Clerk)	
RRA	3
Technician	1
Working Supervisor	1
Graduate Studies	1

GROUP 3	
Administrator (Post BA/Certif Prog)	1
Assistant Director (RRA/ART)	1
ART	1
ART (2 Yr, Coll/CC)	1
RRA	2
RRA (Staff/Line - Head Prog)	1
RRA - Masters Degree	1

TASK #2 Concerning Career - Mobility Diagrams for the Profession
Input from the State Review Committees
Frequency and Utilization of Occupation Descriptors - LEVEL 7

GROUP 1	GROUP 2		GROUP 3	
Supervisor (RRA/AKT)	Administrator	1	Director	1
	Assistant Director (RRA/ART)	1	RRA (Bachelor's Degree and Exam)	2
	Graduate Studies	2	RRA (Doctorate)	1
	Health Information Coordinator (Master's/Doctorate)	1		
	MRT	1		
	(Asst Ut Rev Coord)			
	(Suppervisor)			
	(Supervisor - transcription)			
	(Medical Care Abstractor)			
	(Correspondence Supervisor)			
	(SNOmed Coders)			
	(Tumor Registry Secretary)			
	PSRO Audit	1		
	PSRO Current Review	1		

EXHIBIT 7 Table G

TASK #2 Concerning Career - Mobility Diagrams for the Profession
Input from the State Review Committees
Frequency and Utilization of Occupation Descriptors - LEVEL 8

GROUP 1		GROUP 2		GROUP 3	
Assistant Department Head (RRA/ART)	1	Asst/Assoc Director (RRA/ART)	1	RRA (Grad Degree)	1
		Asst Director (Util Rev Coord)	1	Note: New York indicates at this level one can go to (Pvt Industry, Government, Information System, Consulting, Advanced Administration, Education and Research)	
		Director (RRA/ART)	1		

EXHIBIT 7 Table H

TASK #2 Concerning Career - Mobility Diagrams for the Profession
Input from the State Review Committees
Frequency and Utilization of Occupation Descriptors - LEVEL 9

GROUP 1		GROUP 2		GROUP 3
Administrator	2	Director	1	-0-
Administrator/Director (RRA/ART)	1	Director, RRA	1	
ART (CC)	1			
ART (CC/Coll and Exam)	1			
Department Head (No RRA)	1			
Department Head, RRA/ART	1			
Director, Department Head, RRA/ART	1			
RRA	2			
RRA (Bachelor's Degree & Exam)	2			

EXHIBIT 7. Table 1

GREATEST NUMERICAL FREQUENCY DISTRIBUTION OF OCCUPATION DESCRIPTORS
DERIVED FROM STUDY OF CAREER - MOBILITY DIAGRAMS

Submitted by State Review Committee as Best Depicting the State Mobility

Task #2: Concerning Career Mobility Diagrams for the Profession

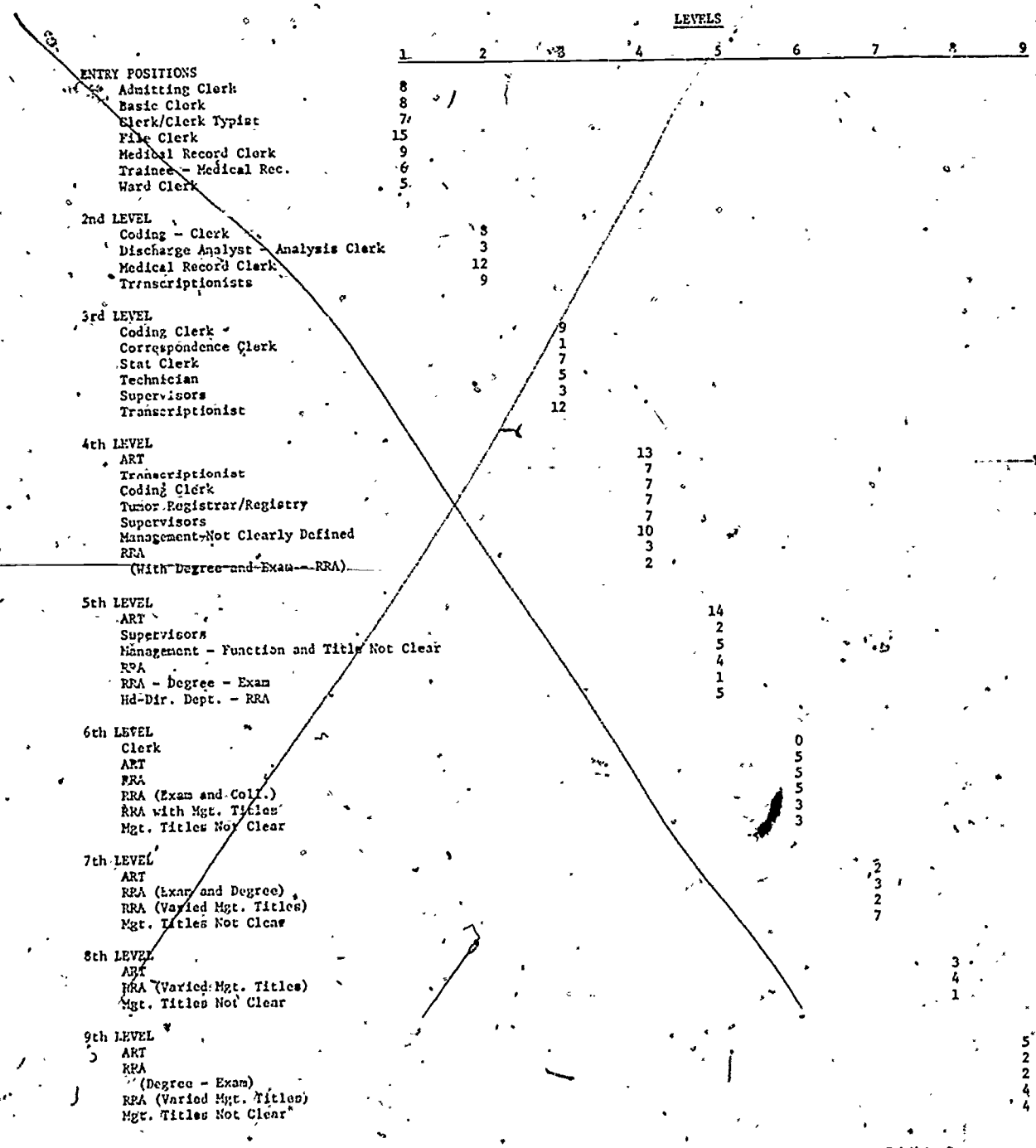


Exhibit 8

Summation Table of Frequency Distribution
of all Descriptors Submitted by State Review Committees
Task #2 Concerning Career Mobility Diagrams

		Variations	Total
Trainee (MR)	8		
Ward Clerks	14		
Statistics	15		
AkT	15	38	53
RRA	18	41	59
Technician	19		
Medical Record Clerk	23	19	42
Admitting Clerks	25		
Transcriptionist	26	30	56
Tumor Registry	26		
Coding Clerks	32		
File Clerks	30		
"Clerks"	99		
Variables*	103		

*Includes title not assigned to above.

The following were included in data and on diagrams submitted by State Review Committees.

Education	12
Secretarial	24
Supervisors	33
Functions Only	49

NOTE: On accompanying feeder tables, it will be noted that some titles appear in two tables because of title. Example: Tumor Registry Secretary will appear on Secretarial list as well as Tumor Registry grouping.

EXHIBIT 9 Table I

Frequency Distribution of All
Descriptors Submitted by State Review Committees
Task #2: Concerning Career-Mobility Diagrams

Trainee	
Medical Record Trainee	1
Trainee in Medical Record Department	1
Trainee into Medical Record Service	6
	8
Ward Clerks	
Ward Clerk	7
Ward Clerk (OJT)	1
Ward Clerk (OJT-JC, AHA)	5
Ward Clerk (OJT-Acad.)	1
	14
Statistics	
Statistician	2
Stat. and Analysis Clerk	8
Stat. and Analysis Clerk (OJT-JCAH)	1
Statistics	3
Statistics and Coder	1
	15

EXHIBIT 9 Table II

Frequency Distribution of all
Descriptors Submitted by State Review Committees
Task #2: Concerning Career-Mobility Diagrams

ART

ART	14
ART (Assoc. Degree)	1
ART (Assoc. Degree/CC and Accred. Exam)	2
ART (CC-Coll. JC and Accred.)	11
ART (or ART Corresp. Student)	1
ART Medical Audit	1
ART Staff/Line	1
ART Supervisor	1
Administrator or Director (RRA/ART)	1
Assistant (ART)	1
Asst. Dept. Head (RRA/ART)	1
Asst. ART (Assoc. Degree and Accred.)	1
Asst. Director (RRA/ART)	2
Asst. or Assoc. Director (RRA/ART)	1
Dept. Head (RRA/ART)	1
Director Medical Record Department (RRA/ART)	1
Director or Mgr. (HAA or ART)	1
Director (RRA/ART)	1
Exam - ART	1
Health Record Analyst (ART-Assoc. Degree & Accred)	1
Medical Record Director (RRA/ART)	1
Non-specialist ART	1
Specialist ART	1
Supervisor ART	1
Supervisor, RRA/ART	2
Supervisor, (ART-OJT)	1
Unit Supervisor (ART)	1

EXHIBIT 9 Table III

Frequency Distribution of all
Descriptors Submitted by State Review Committees
Task #2: Concerning Career-Mobility Diagrams

RRA

RRA	14
RRA (BA and Reg. Exam)	11
RRA (Academic Program)	1
RRA (Staff/Line)	1
RRA (Bachelors Degree)	1
RRA (Masters Degree)	1
RRA (Doctorate Degree)	1
Administrator or Director (RRA/ART)	1
Administrator (RRA - Bacc. Degree & Reg)	1
Administrator (Post BA and Certif. Program)	1
Asst. Dept. Hd. (RRA/ART)	1
Asst. Dept. Hd. (RRA)	1
Asst. Director (RRA/ART)	2
Asst. Director-Health Information System, RRA	1
Asst. or Assoc. Director (RRA or ART)	1
Asst. Dir. Health Record Services, RRA	1
Chairman/Director of Health Records Administration Program (RRA with Grad. Degree)	1
Co-ordinator, Asst. Prof. Clinical Instructor (RRA)	1
Consultant, RRA, (Rehab. Hosp. NH)	1
Department Head (RRA)	2
Dept. Hd. (RRA/ART)	1
Dept. Director (RRA)	2
Director, Educ. Prog. (RRA)	1
Director, Med. Rec. Dept. (RRA/ART)	1
Director, Health Record Services (RRA)	1
Director (RRA/ART)	1
Director, RRA	1
Exam RRA	1
Health Record Specialist-Health Data System, RRA	1
Medical Record Director RRA/ART	1
Manager, Health Record Services, RRA	1
Supervisor, RRA/ART	2

EXHIBIT 9 Table IV

Frequency Distribution of All
Descriptors Submitted by State Review Committees
Task #2: Concerning Career-Mobility Diagrams

Technicians	
Coding/or abstracting technician	1
MRT - Corresp. Program	1
Medical Record Technician	3
MRT - Vocational Training	1
MRT	4
Technician	8
Technician (CC/Bus. Schl.)	1
	19
Medical Record Clerks	
Medical Record Clerk - Jr. (OJT)	1
Medical Record Clerk - Sr. (OJT)	1
Medical Record Clerk "A" (File Room, Patient Index, Float Clerk, Clinic Clerk, Research Clerk)	1
Medical Record Clerk "B" (Disch. Analysis, Microfilm Clerks, Float Clerks)	1
Medical Record Clerk "C" (Birth Registration, Util. Review Clerk, Transcription Receptionist)	1
Medical Record Clerk - Basic	1
Medical Record Clerk	23
Medical Record Clerk (OJT-JC)	6
Medical Record Clerk (OJT-Acad.)	1
Medical Record Clerk (Other)	1
Medical Record Clerk (Sr.)	1
Senior Medical Record Clerk	1
	42
Admitting Clerks	
Admission and Filing Clerk (OJT)	1
Admission Clerk	8
Admission Clerk (OJT)	2
Admitting Clerk	7
Admitting Clerk (OJT/JC)	4
Admission & Discharge Clerk	2
Admitting Clerk (OJT-Acad.)	1
	25

EXHIBIT 9 Table V

Frequency Distribution of All
Descriptors Submitted by State Review Committees
Task #2: Concerning Career-Mobility Diagrams

Transcription	
Medical Record Transcriptionist	4
Medical Transcriber	3
Medical Transcriptionist	3
Medical Transcriptionist (JC/Bus Schl. Med. Sec'y Prog./CC	1
Medical Transcriptionist I	1
Medical Transcriptionist II	1
Transcription Clerk	1
Transcription Secretary	1
Transcrip.	3
Transcriptionist	26
Transcriptionist (Bus. Sch. or CC)	1
Transcriptionist (CC/OJT/Bus. Schl/JC)	7
Transcriptionist (OJT-Acad.)	1
Transcription Supervisor	1
Supervisor of Transcription	1
Supervisor, Medical Transcription	1
	56
Tumor Registry	
Tumor Reg.	2
Tumor Registry Clerk/Registrar	1
Tumor Registry Clerk	2
Tumor Registrar	9
Tumor Registry Secretary	2
Tumor Registrar (OJT-JC-AHA Wkshp)	7
Tumor Registry	1
Tumor Register	1
Tumor Secretary (OJT-Acad.)	1
	26
Coding Clerks	
Coding and Abstracting Clerk	1
Coding Clerk	13
Coding Clerk (OJT-JC)	6
Coder	4
Coder/Tumor Registry	1
Medical Record Coder	6
SNOMed Coders	1
	32
File Clerk	
File Clerk	19
File Clerk (OJT)	1
Filing Clerk	8
Filing Clerk (OJT)	2
	30

EXHIBIT 9 Table VI

Frequency Distribution of All
Descriptors Submitted by State Review Committees
Task #2: Concerning Career-Mobility Diagrams

Clerks

Assembly	1
Basic Clerk	8
Basic Clerk (OJT)	2
Basic Filing Clerk	1
Birth Certificate Clerk	2
Chart Analysis Clerk	3
Clerical Skills	1
Clerk	4
Clerk 1, 2, 3	2
Chief Clerk	1
Clerk Typist	2
Clerk Typist 1, 2, 3	2
Clinic Clerk	1
Correspondence Clerk	5
Discharge Analysis Clerk	3
Discharge and Stat. Clerk (OJT)	1
Discharge Clerk	2
Discharge Clerk (Chart Analyzer)	1
Discharge Clerk (OJT)	1
Floating/Relief Clerk	1
Float Clerk	2
General Clerk	1
Health Record Clerk	1
Indexing Clerk	1
Insurance Clerk	8
Legal Clerk	1
Master Index Clerk	1
Medical Audit Clerk	1
Medicare Clerk	1
Microfilm Clerk	4
Non-Specialist Clerk	1
PAS Clerk	1
Patient Index Clerk	1
Photo Copy Clerk	1
Processing Clerk	1
Quantitative Analysis Clerk	1
Research Clerk	1
Release of Information Clerk	2
Specialized Clerk	1
Specialist Clerk	2
Stat. and Analysis Clerk	8
Stat. and Analysis Clerk (OJT-JCAH)	1
Statistical Clerk	6
Statistics Clerk	2
Utilization Review Clerk	1
Unit Clerk	1
Vital Statistics Clerk	1
Tumor Registry Clerk/Registrar	1
Tumore Registry Clerk	2
	99

EXHIBIT 9 Table VII

Frequency Distribution of All
Descriptors Submitted by State Review Committees
Task #2: Concerning Career-Mobility Diagrams

Variables	
Administrator	10
Asst. Administrator	2
Asst. Utilization Review Coordinator	1
Asst. Dept. Head	1
Asst. Director	1
Asst. Dept. Director	1
Asst. Director Medical Record Dept.	2
Audit Coordinator	1
Admissions Officer	1
Birth Registration	1
Chief, Medical Administrative Services (Gov't Agency)	1
Chart Analyst	2
Chief Medical Record Administration (Gov't Agency)	1
Concurrent Review Co-ordinator	1
Department Head	3
Department Administration	1
Department Director	1
Director/Asst.	1
Director	1
Director or Manager (MAA or ART)	1
Director, Medical Records Service	1
Director Medical Record Dept.	4
Discharge Analyst	2
Educator	1
Consultant	3
Consultant NH	1
Correspondence Student	2
Data Specialist	1
Departmental Employee	1
Federal and State System & Other Gov't Positions	1
Coding and/or Abstracting Technician	1
Data Analyst	1
College Student	1
Filing Retriever	1
Health Information Coordinator (Masters or Doctoral Degree)	1
Health Record Analyst	5
Health Researcher	1
HUP-PAS Abstractor	1
Instructor	1
Individual	1
Hospital Committee Liason	1
Jr. College Student	1
Information Analyst/Agency or Corporation	1
Medical Record Employee	1

EXHIBIT 9 Table VIIIa

Frequency Distribution of All
Descriptors Submitted by State Review Committees
Task #2: Concerning Career-Mobility Diagrams

Nosologist	1
Other Employees	1
Q.A.P. Coordinator	1
Medical Audit Asst.	1
Medical Care Abstractor	1
Medical Data Analyst	1
Medical Librarian	1
MRT-School Director	1
MRT-School Instructor	1
MRA (Program)	1
MRA	3
Medical Record Administrator	3
Receptionist	4
Receptionist (OJT-JC)	1
Research Associate	1
Patient Care Evaluation Asst.	2
Patient Care Evaluator	1
Teletype Operator	1
Trained Applicant	1
Statistician	2
Stat/ 2A	1
Stat and Anal.	1
Statistical and Audit Coordinator	1
Utilization Review Coordinator	2
Utilization Coordinator	1
	103

EXHIBIT 9 Table VIIIb

Frequency Distribution of All
Descriptors Submitted by State Review Committees
Task #2: Concerning Career-Mobility Diagrams

Education

AMRA Course/JC	1
Education Program	1
Formal Education	1
Graduate Studies	5
Graduate Studies (MBA/MHA)	1
Medical Record Trainee Program	1
Terminology	1
Vocational Teaching	1
	12

EXHIBIT 9 Table IX

Frequency Distribution of All
Descriptors Submitted by State Review Committees
Task #2: Concerning Career-Mobility Diagrams

Secretarial

Cancer Program Secretary	1
Cancer Registry Secretary	1
Clinic Secretary	1
Correspondence Secretary	1
Executive Secretary	1
Insurance Correspondence Secretary	1
Insurance Secretary (OJT-JC)	1
Medical Record Dept. Secretary	1
Medical Secretary	3
Medical Sec'y/Transcriptionist/Steno (1,2,3)	1
Medical Staff Sec'y (JC/Bus. Sch.)	1
Medical Staff Secretary	1
Medicolegal Secretary	1
Secretary	2
Secretary to Dept. Hd.	1
Stenographer	1
Transcription Secretary	1
Tumor Registry Secretary	2
Tumor Secretary (OJT-Acad.)	1
	24

EXHIBIT 9 Table X

Frequency Distribution of All
Descriptors Submitted by State Review Committees
Task #2: Concerning Career-Mobility Diagrams

Supervisors

Correspondence Supervisor	1
Section Supervisor	1
Shift Supervisor	1
Supervisor of Clerks	1
Supervisor of Transcription	1
Supervisor ART	1
Supervisor, Transcription	1
Supervisor, Clerical Person.	1
Supervisor	12
Supervisor (OJT)	6
Supervisor, (OJT, JC, Bus. Sch.)	2
Working Supervisor	1
Supervision	1
Transcription Supervisor	1
Supervisor, Medical Records	1
Supervisor, Medical Transcription	1
	33

EXHIBIT 9 Table XI

Frequency Distribution of All
Descriptors Submitted by State Review Committees,
Task #2: Concerning Career-Mobility Diagrams

Functions Only

Audit Coordination	2
Coding and Abstracting Function	1
Coding	1
Disease/Registry Function	1
Consulting	2
Department Administration	1
Fiscal Management	1
Coding and Abstracting	1
Correspondence-Medical legal	1
Data Management	2
Data Processing	1
Curriculum Development	1
Filing	1
Indexing	1
Insurance and Correspondence	1
Inservice Training	1
Medical Transcription	3
Qualitative Analysis Function	1
Patient Care Audit Function	1
Performance Evaluation	1
Management	1
Medical Audit	1
Medical Information	1
Microfiliming	1
Non-hospital Program Development	1
PSRO Audit	1
PSRO Current Review	1
Patient Index	1
Record Analysis-Statistics	1
Record Control	1
Research	2
Reseerch Studies	1
Research Project Planning and Development	2
Release of Information	3
Transcription	1
Staff Counselling	3
Statistics	1
Utilization Review	49

EXHIBIT 9 Table XII

APPENDIX E

SMRA AFFECT REPORT

Final Report on Affect Measurement of Medical Record Personnel.

FINAL REPORT ON AFFECT MEASUREMENT OF MEDICAL RECORD PERSONNEL

by

Indiana Medical Record Association Task Force on
Roles and Functions of Medical Record Personnel

Introduction

The purpose of this document is to report the results of five assignments, relating to the measurement of affect in medical record personnel, which were undertaken by the Indiana Medical Record Association Task Force on Roles and Functions of Medical Record Personnel. The assignments were completed in conjunction with the American Medical Record Association's (AMRA) "Study to Delineate Roles and Functions of Medical Record Personnel". The five assignments were:

1. To describe the task force's perceptions of the structure of affect
2. To identify ways in which three proposed approaches to measuring affect are acceptable and unacceptable to the task force
3. To place the three proposed approaches to measuring affect in rank order according to acceptability
4. To assign affect taxonomy codes to each of the principles contained in AMRA's Code of Ethics for six medical record occupational levels
5. To improve the key words list previously prepared in conjunction with AMRA's "Study to Delineate Roles and Functions of Medical Record Personnel.

Also included in this document are recommendations from the task force concerning affect measurement for medical record personnel.

Members of the Indiana Medical Record Association Task Force on Roles and Functions of Medical Record Personnel were: Janatha R. Ashton, RRA, Chairman;

and Frances Barga, ART; Doreen Brandenburg, RRA; Bernice D. Campbell, RRA; Karen Drury, RRA; Ann R. Greenlee, RRA; Mary Ann Lacy, RRA; and Mary Ann Michau, RRA, Members.

Assignment 1. To Describe the Task Force's Perceptions of the Structure of Affect

Affect was defined as a range of feelings and emotional qualities (interests, inclinations, attitudes, dispositions, values and appreciations), which form the basis for individuals to utilize skills and knowledges. Affect was considered to occur in varying degrees in individuals, and to be as basic to the successful functioning of medical record personnel at all occupational levels as knowledges and skills.

The task force agreed that the degree to which affect is present in an individual could be classified on a continuum consisting of five basic categories ranging from the lowest, receiving, to the highest, characterization.[1] The remainder of this report is based on the assumption that affect does not change significantly in a major part of the adult population.

Assignment 2. To Identify Ways in which Three Proposed Approaches to Measuring Affect Are Acceptable and Unacceptable to the Task Force

Three alternative approaches to measuring affect were presented to the task force by representatives of AMRA's "Study to Delineate Roles and Functions of

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[1] Krathwohl, D.R., Bloom, B.S., Masia, B.B., Taxonomy of Educational Objectives, The Classification of Educational Goals, Handbook II: Affective Domain, p. 95.

Medical Record Personnel". The three approaches presented were role perception, ethical standards and professional relationships.

The first approach, role perception, involved construction of an affect profile for each medical record occupational level. The affective elements contained in AMRA's Code of Ethics formed the basis for the ethical standards approach. The third approach, professional relationships, involved measuring role identification and conflicts through the use of approach behaviors.

Of the three affect measurement approaches presented, role perception appeared to be the one most open to challenge by persons being measured, as well as the profession in general. The task force felt that the profile might be perceived by practitioners as being constructed of seemingly vague and unidentified factors. We could forsee, however, that a compilation of data resulting from the role perception testing might be very useful to the profession in that patterns and trends might be readily pinpointed. Such information could be useful to educators in counseling and teaching students, to persons planning continuing education programs for practitioners, and to persons considering applicants for medical record positions.

The task force felt that the ethical standards approach to measuring affect would be the most defensible of the three approaches presented because it would be based on long-established ethical principles accepted in medical record practice. The one disadvantage to this measurement approach was that the number of affects which could be measured were necessarily limited to those contained in the Code of Ethics. Possibly there are more affects than those represented which could or

should be possessed by medical record personnel.

The professional relationships approach to measurement, like the ethical standards approach, was considered to offer the advantage of defensibility because it would be based on identified, well-defined and accepted affective traits. Further, this approach seemed to offer a more comprehensive test than would be possible with the ethical standards because the number of affects to be tested would not be limited to any particular document.

Assignment 3. To Place the Three Proposed Approaches to Measuring Affect in Rank Order According to Acceptability

The Q-Sort method was employed to obtain the task force's decision for a rank order of the three approaches to measuring affect. The Q-Sort was selected because it would provide a quantitative measure of the group's opinion. The results are shown in Table 1.

TABLE 1. Q-SORT NUMBER AND RANK ORDER FOR PROPOSED APPROACHES TO MEASURING AFFECT

Affect Measurement Approach	Q-Sort Number	Rank Order
Ethical Standards	30	1
Professional Relationships	10	2
Role Perception	8	3

Because the ethical standards approach received the highest Q-Sort number, and therefore indicated the preference of the majority of the task force members, it was ranked as first choice. Likewise, professional relationships and role perception were ranked choices two and three respectively.

Assignment 4. To Assign Affect Taxonomy Codes to Each of the Principles Contained in AMRA's Code of Ethics for Six Medical Record Occupational Levels

The task force assigned taxonomy codes to the 12 ethical principles contained in AMRA's Code of Ethics for six medical record occupational levels. The occupational levels were: consultation, administration, supervision, technical, transcription and clerical. The taxonomy codes were derived from Taxonomy of Educational Objectives. (Appendix A)

In assigning the taxonomy codes to the ethical principles, each principle was interpreted as it would apply to each occupational level, regardless of membership, or lack thereof, in the American Medical Record Association.

The Q-Sort method was again utilized to obtain the task force's opinion of the taxonomy code to be assigned. The resulting taxonomy codes are presented in Table 2.

Each ethical principle in the Code of Ethics was considered to be applicable to the six medical record occupational levels. The highest affect taxonomy code assigned was five (characterization), to the consultation and administration levels for ethical principles number seven and nine. The lowest code assigned was two (responding), and it appeared in varying amounts in all occupational

TABLE 2. DISPLAY OF AFFECT TAXONOMY CODES FOR ETHICAL PRINCIPLES IN SIX MEDICAL RECORD OCCUPATIONAL LEVELS

Ethical Principles	Affect Taxonomy Codes* for Medical Record Occupational Levels					
	Consultation	Administration	Supervision	Technical	Transcription	Clerical
1 Place service before material gain, the honor of the profession before personal advantage, the health and welfare of patients above all personal and financial interests, and conduct himself in the practice of this profession so as to bring honor to himself, his associates, and to the medical record profession.	4	4	3	3	3	2
2 Preserve and protect the medical records in his custody and hold inviolate the privileged contents of the records and any other information of a confidential nature obtained in his official capacity, taking due account of applicable statutes and of regulations and policies of his employer.	4	4	3	2	2	2
3 Serve his employer loyally, honorably discharging the duties and responsibilities entrusted to him, and give due consideration to the nature of these responsibilities in giving his employer notice of intent to resign his position.	4	4	3	2	2	2
4 Refuse to participate in or conceal unethical practices or procedures.	4	4	3	2	2	2
5 Report to the proper authorities but disclose to no one else any evidence of conduct or practice revealed in the medical records in his custody that indicates possible violation of established rules and regulations of the employer or of professional practice.	4	4	3	2	2	2
6 Preserve the confidential nature of professional determinations made by the staff committees which he serves.	4	4	3	2	2	2
7 Accept only those fees that are customary and lawful in the area for services rendered in his official capacity.	5	5	3	2	2	2
8 Avoid encroachment on the professional responsibilities of the medical and other para-medical professions, and under no circumstances assume or give the appearance of assuming the right to make determinations in professional areas outside the scope of his assigned responsibilities.	4	4	3	2	2	2

*Taxonomy codes are explained in Appendix A.

TABLE 2. DISPLAY OF AFFECT TAXONOMY CODES FOR ETHICAL PRINCIPLES IN SIX MEDICAL RECORD OCCUPATIONAL LEVELS – CONTINUED

Ethical Principles	Affect Taxonomy Codes for Medical Record Occupational Levels					
	Consultation	Administration	Supervision	Technical	Transcription	Clerical
9 Strive to advance the knowledge and practice of medical record science, including continued self-improvement, in order to contribute to the best possible medical care.	4	4	3	2	2	2
10 Participate appropriately in developing and strengthening professional manpower and in representing the profession to the public.	4	4	3	3	3	3
11 Discharge honorably the responsibilities of any Association post to which appointed or elected, and preserve the confidentiality of any privileged information made known to him in his official capacity.	3	3	2	2	2	2
12 State truthfully and accurately his credentials, professional education, and experience in any official transaction with the American Association of Medical Record Librarians and with any employer or prospective employer.	4	4	3	2	2	2

levels except consultation and administration. Affect code number one (receiving) was not utilized for any of the six occupational levels.

The affect taxonomy codes assigned to the consultation and administration levels were identical, as were the codes for the technical and transcription levels. The supervision level was ranked one taxonomy code lower than the administration and consultation levels in all but two instances, principles seven and nine, where the supervision level was ranked two codes lower. The technical and transcription

levels were one code lower than the supervision level with the exception of ethical principles numbers one and 10, where these two levels were ranked the same as the supervision level. The clerical level codes were identical to those of the transcription and technical levels with one exception, ethical principle number one, which was given an affect code of two for the clerical level.

To assist with further interpretations of the data, the assigned affect taxonomy codes for the medical record occupational levels were graphically displayed. Displayed in Figure 1 is the distribution of affect codes for the consultation and administration levels.

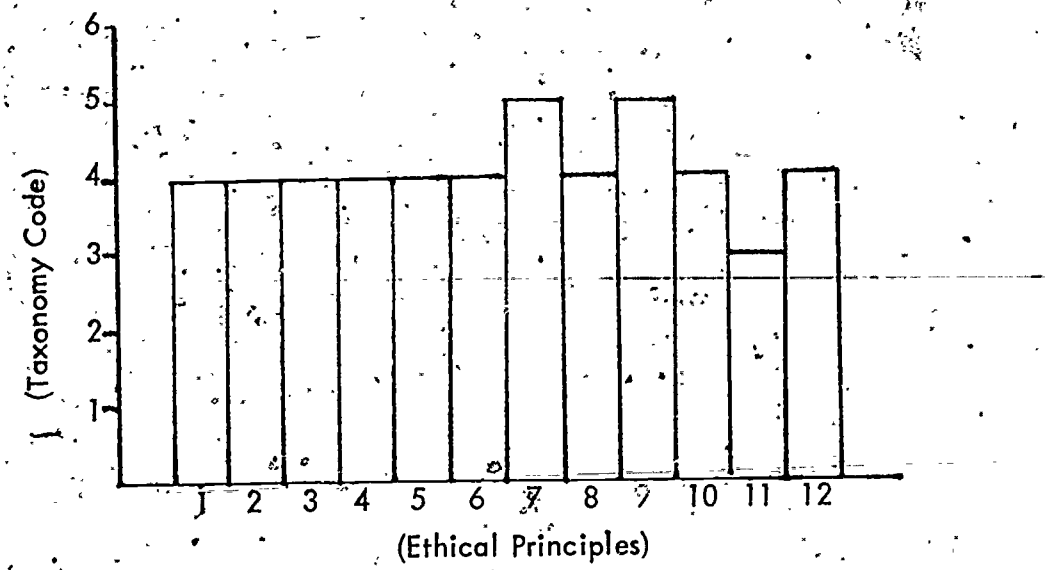

Figure 1. Distribution of affect codes for ethical principles - consultation and administration levels

The lowest affect code assigned to the administration and consultation levels was three (valuing) for ethical principle number 11. The remaining ethical

principles were assigned an affect code of four (organizing) with two exceptions. Ethical principles seven and nine were assigned the highest possible code, a five (characterization).

Displayed in Figure 2 are the taxonomy codes assigned for the supervision level.

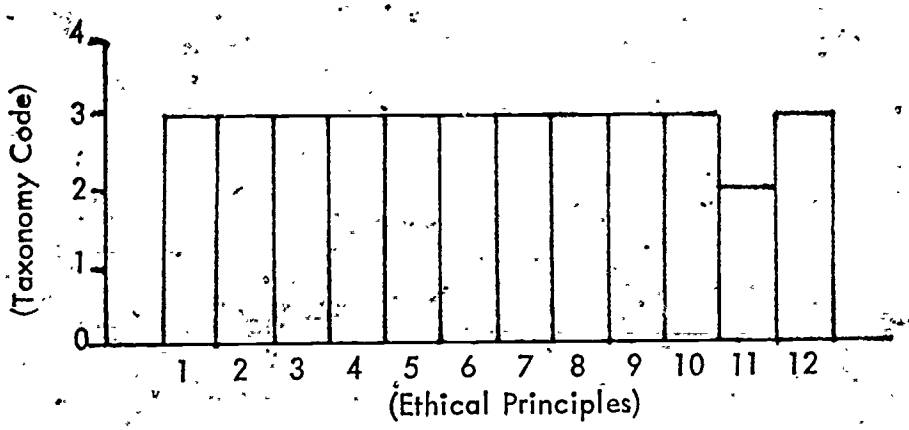

Figure 2: Distribution of affect codes for ethical principles - supervision level

Persons functioning on the supervision level were assigned taxonomy codes of three (valuing) for all ethical principles except number 11 which received a code of two (responding).

Figure 3 shows the affect taxonomy codes for the technical and transcription levels. These two occupational levels are displayed together because the taxonomy codes assigned to them were identical.

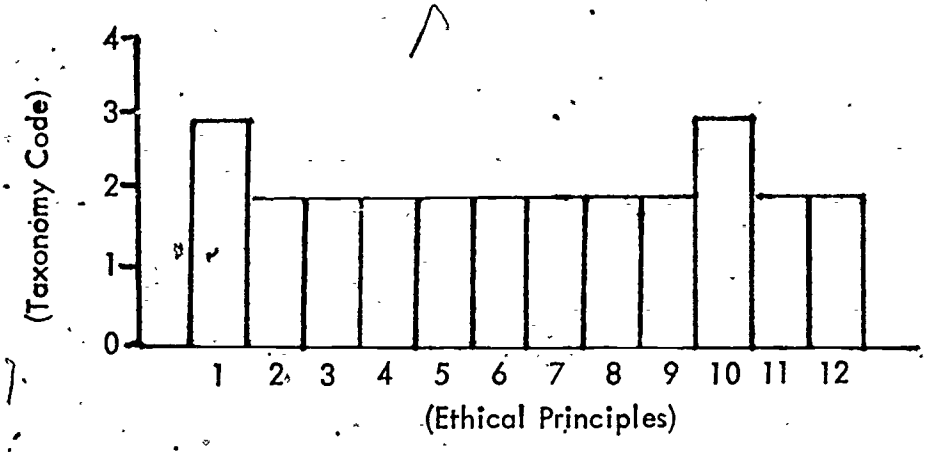

Figure 3. Distribution of affect codes for ethical standards - technical and transcription levels

An affect code of two (responding) was assigned to 10 of the 12 ethical principles for the technical and transcription levels. Ethical principles number one and 10 received taxonomy codes of three (valuing).

Displayed in Figure 4 is the distribution of affect taxonomy codes for the clerical level.

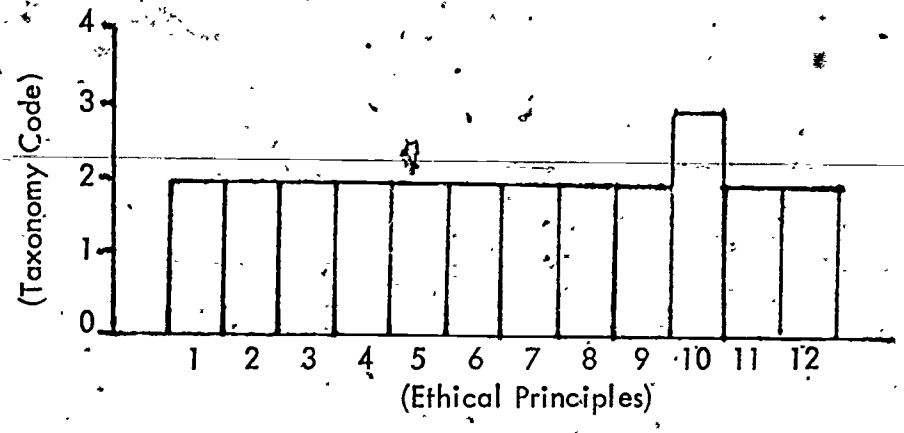

Figure 4. Distribution of affect codes for ethical standards - clerical level

The highest taxonomy code assigned for persons functioning on the clerical level was a three (valuing) for ethical principle number 10. All other ethical principles were assigned taxonomy codes of two (responding).

Assignment 5. To improve the key words list, previously prepared in conjunction with AMRA's "Study to Delineate Roles and Functions of Medical Record Personnel."

Numerous attempts were made by the task force to complete this assignment without success. Because all attempts to improve the key-words list failed, the key words list was approved as written.

Summary

This document reported the results of five assignments made to the Indiana Medical Record Association Task Force on Roles and Functions of Medical Record Personnel by AMRA's "Study to Delineate Roles and Functions of Medical Record Personnel". All five assignments related to the measurement of affect in medical record personnel.

The first assignment was to describe our perceptions of the structure of affect. We defined affect as a range of feelings and emotional qualities (interests, inclinations, attitudes, dispositions, values and appreciations), which form the basis for individuals to utilize skills and knowledges. Affect was perceived to occur in varying degrees in individuals, and to form the basis for persons to effectively utilize skills and knowledges. Our report was based on the assumption that affect

does not change significantly in the major part of the population.

The second assignment was to identify ways in which three proposed approaches to measuring affect were acceptable and unacceptable. The proposed approaches were role perception, ethical standards and ethical relationships. The task force felt that each approach possessed elements of acceptability and unacceptability. Role perception seemed to be the one approach most open to challenge and the least defensible of the three. We could forsee, however, that a compilation of data resulting from role perception measurement could potentially be of considerable benefit to the profession in identifying trends and patterns. The ethical standards approach was deemed very acceptable, primarily because of its defensibility. It was unacceptable only from the standpoint that a limited number of affects are contained in the Code of Ethics on which it would be based. The task force felt that possibly medical record personnel should/could be tested on more affects than the number contained in the Code of Ethics. The task force considered the professional relationships approach to measurement acceptable from all standpoints. It seemed to offer the advantage of being both defensible and comprehensive.

The third assignment called for the task force to place the three proposed approaches to measuring affect in rank order according to acceptability. The Q-Sort method was employed to obtain a quanitative measure of the group's opinion. The ethical standards approach to measurement received the highest Q-Sort number and was, therefore, ranked as the most acceptable approach. The professional relationships approach received the second highest Q-Sort number and role perception received the lowest. Therefore professional relationships was ranked second and

role perception third.

The fourth assignment required the task force to assign affect taxonomy codes to each of the principles contained in AMRA's Code of Ethics for six medical record occupational levels. The Q-Sort method was again utilized to obtain the task force's opinion of the code to be assigned. The consultation and administration occupational levels received identical taxonomy codes for each ethical principle, as did the technical and transcription levels. Table three summarizes the taxonomy codes assigned and also shows the mean and mode taxonomy code for the six occupational levels.

TABLE 3. SUMMARY OF AFFECT TAXONOMY CODES, MEANS AND MODES FOR SIX MEDICAL RECORD OCCUPATIONAL LEVELS

Occupational Level	Taxonomy Code					Mean	Mode
	5	4	3	2	1		
Consultation and Administration	2	9	1	0	0	4.1	4
Supervision	0	0	11	1	0	2.9	3
Technical and Transcription	0	0	2	10	0	2.2	2
Clerical	0	0	1	11	0	2.1	2
Total	2	9	15	22	0	2.8	2

In only two instances was the highest taxonomy code, five (characterization) assigned. The consultation and administration levels received the five level codes. No occupational level was assigned a taxonomy code of one (receiving). The mean (mathematical average) taxonomy code for the total group was 2.8, while the mode

(most frequently occurring code) was two. The consultation and administration levels received the highest mean, 4.1, and the highest mode, four. The lowest mean, 2.1, and the lowest mode, two, were assigned to the clerical level. The technical and transcription levels were only slightly above the clerical level with a mean taxonomy code of 2.2 and a mode of two. The mean affect taxonomy code for the supervision level was 2.9 and the mode was three.

The fifth assignment was to improve a previously prepared key words list. The key words list was to be utilized in conjunction with the professional relationships approach to measurement. Because no appreciable improvements were made with the list, it was approved as written.

Recommendations

The task force recommends use of the ethical standards approach to measuring affect. Concerning the use of this approach, we have two suggestions:

1. The "Patient's Bill of Rights" (Appendix B), published by the American Hospital Association, be investigated as a further addition to AMRA's Code of Ethics, as a basis for testing ethical standards.

2. That ethical principles as stated in AMRA's Code of Ethics be edited to insure applicability and correct interpretation for each occupational level of medical record personnel.

Should affect measurement for medical record personnel become a reality, we recommend that:

1. Test items be regularly reviewed and updated to insure that changing needs of the profession are reflected in the testing program.

2. AMRA be in control of the testing program, rather than another agency.

3. The feasibility of using project developed resources to meet other needs in the profession be considered, e.g. should the data be used to counsel students in formal educational programs, etc.

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APPENDIX

Appendix A

1. Receiving
2. Responding
3. Valuing
4. Organizing
5. Characterization by a value or value complex[2]

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[2] Krathwohl, D.R., Bloom, B.S., Masia, B.B., Taxonomy of Educational Objectives, The Classification of Educational Goals, Handbook II: Affective Domain, p. 95.

APPENDIX F

EVALUATIVE REPORT

Formative Evaluation Report for Roles, Functions, Training and Proficiency Tests for Medical Record Personnel Project

FORMATIVE EVALUATION REPORT

FOR

ROLES, FUNCTIONS, TRAINING AND PROFICIENCY TESTS FOR MEDICAL RECORDS PERSONNEL PROJECT

BY

Patrick J. Weagraff, Ed. D

September 5, 1974

INTRODUCTION

The task of conducting a formulative evaluation of an ongoing project is not an easy one. Numerous, ever changing variables must be dealt with in precise ways. Moreover the evaluation must deal with the "process" that project staff have used as well to assess the probable or intended "products" which are expected to result.

The complexity of the evaluation is further compounded by the fact that it is very difficult to make relative comparisons with other similar research projects. A brief review of research prior to the evaluation reveals few undertakings of a similar scope or magnitude.

The purpose of this evaluation report is not to criticize a good project. Rather it is designed to make a good project even better. Accordingly, this is structured to report findings in five areas. They are: 1) Research Design and Methodology; 2) Operations Plan; 3) Data Base; 4) Analysis Techniques; 5) Curriculum Guidelines and Proficiency Tests. After a brief discussion of findings or observations, specific recommendations are made.

RESEARCH DESIGN AND METHODOLOGY

The research design and methodology used in this project are valid and appropriate. Moreover the work completed to date appears to have been

accomplished with a high degree of preciseness. This latter point is crucial when conducting research involving task analyses. It is very easy for project staff to "take the easy way out." Happily, project staff have worked in a systematic way to implement sound research methodology.

It is notable that the research methodology is at a level and is valid enough to ensure that the end products will guarantee adequate performance on the job. Clearly the products of the project will also be firmly rooted in sound research. Accordingly a realistic curriculum guide and valid competency tests can be developed.

Recommendation 1

It is suggested that project staff seek to validate the task lists with people representing a broader geographic cross section in states than currently being planned.

Recommendation 2

Prior experience of the evaluator clearly shows the appropriateness of using Bloom's taxonomy as a means of organizing task functions. Project staff are urged to continue indepth investigation in this area.

Recommendation 3

Analysis of task data reveals that there is a heavy emphasis on "perceived functions," rather than "actual on-site analysis." To

some extent the Pittsburgh study addresses this, however, it is suggested that project staff explore means of involving workers (from both large and small institutions) in the validation and/or refinement of the analyses.

Recommendation 4

The use of a national advisory committee is to be commended. It is suggested that staff explore ways to involve more curriculum experts and educators as the project nears the point where their expertise will be useful.

OPERATION PLAN

The goals of this project are very clear. Of even greater importance, the operations plan to be implemented is realistic and will achieve the goals of the project. While this plan does not exist in one document, the evaluator was able to obtain the necessary information from the proposal, reports of the advisory committee, and discussions with project staff.

Recommendation 5

Based upon the advisory committee reports it appears they are not contributing as much information or data as desired or needed. It is suggested that project staff consider using a "question format" for the next advisory committee meeting. That is four or five specific

questions be prepared in advance--questions such as--What is the consensus of this group concerning the career ladder prepared by project staff? The committee when faced with a specific question will then have little choice other than to discuss it and make specific recommendations.

Recommendation 6

Based upon the proposal, it appears the project is slightly (2-4 months) behind its projected time line. To compensate project staff are working in three phases of the project simultaneously. This is not a large problem. However, it is suggested that project staff carefully schedule the remaining work to ensure a timely completion. Staff might also want to consider requesting a "no cost extension" of the project by DHEW.

Recommendation 7

The project staff are to be commended for preparing periodic reports detailing the process they have gone through to implement the operational plan. It is suggested that such reports continue if time and finances permit. They tend to lend validity to the work which has been completed.

DATA BASE

It is somewhat disturbing to discover an inadequate data base for this

project to be built upon. Nationally gathered, empirical data concerning job mobility and the differences between ART and RRA curricula appears to be lacking or badly out of date. Moreover, several basic decisions dealing with the credentialing of people in the medical records field need to be made if the research project is to achieve the success now envisaged.

It is also disturbing to note that while several task analysis documents exist (see page 5 of Technical Proposal) professionals in the field and the project staff found it necessary to reject them. The need for such action only highlights the weakness of the data base project staff have to work with.

Recommendation 8

Any temporary project with limited resources cannot expect to provide a sound or continuous data base for a field as large as medical records. Accordingly, it is suggested that AMRA explore means for providing a greater impetus for emperically based research in the medical records field.

Recommendation 9

Project staff should clearly identify the "assumptions" they made concerning the validity of the data base. In that the data base is weak, users of the project's products will need to know the extent to which such data was used.

Recommendation 10

Project staff and AMRA should explore the feasibility of systematically appraising Bureau of Health Manpower, DHEW, with the need for an appropriate data base for this most important area of the Allied Health professions.

Recommendation 11

It is suggested that AMRA and project staff further explore with the Department of Labor (Leon Lewis specifically) how they might gain access to his files which contain job analyses which were completed in the field but never published. This data would do much to overcome some of the research "overlaps" which now exists.

ANALYSIS TECHNIQUES

The analysis techniques applied to this project can only be described as exemplary. Rarely does one find project staff prepared to go to the extent that they have. Moreover, the documents - Functions for Medical Record Personnel which has resulted from the analysis should be a valuable asset to the field and other researchers.

Recommendation 12

While the analysis techniques are above reproach, some degree of caution is urged not to carry the research too far. Project staff are urged to ponder the question: How detailed must the data be to be used by test developers, curriculum specialists and managers?

Recommendation 13

There is a danger when converting task data to instructional objectives that too many objectives can result. Project staff are urged only to develop behaviorally-based instructional objectives for "high priority-need to know tasks."

Recommendation 14

The base line document Roles and Functions for Medical Records contains information with varying degrees of specificity and data. Project staff are urged to continue their efforts to further clarify and validate this information.

CURRICULUM GUIDELINES AND INFORMATION FOR PROFICIENCY TESTS

While the project has two major products (curriculum guide and information for proficiency tests) most of the work appears to be centered on the latter. This is understandable in light of the potential significance it has for the field. However, in the long run what occurs in medical records programs across the country will have a greater effect.

Recommendation 15

Project staff are strongly urged to start the design of the curriculum guide as soon as possible. While not all of the baseline data is available, some sections or components are. Moreover there are several questions concerning articulation between secondary, post secondary and college programs which need to be addressed. To find the answers to

these questions will take time.

Recommendation 16

Neither the project proposal nor the operation plan contains provision for testing of the curriculum guide once it is developed. Yet this violates the principle that that which is developed should be tested. It is recommended that project staff explore ways in which field testing of the guide could occur.

Recommendation 17

The level of the task data is sufficient to develop proficiency tests. However the data is more than sufficient to develop the curriculum guide and the instructional objectives. Accordingly, it is suggested that the data at no lower than the number two levels be followed for the curriculum guide.

Recommendation 18

Project staff are urged to set up all data banks and structure all materials in such a manner to facilitate periodic updating and revision. The time to initiate such action is while the "product" is being developed. It is further recommended that project staff consider use of computer facilities to achieve this goal.

Recommendation 19

Presently project staff have identified 62 major functions cutting

across three domains. It is recommended that staff further consider ways to combine as many as possible which have "some degree" of commonality.

Recommendation 20

The career lattice developed by project staff seems to reflect the "perceived" rather than the "actual" in terms of job hierarchy, points of entry and competencies required. Project staff are urged insofar as possible to gather more data for revision of this lattice.

Recommendation 21

Of paramount importance is the need to maintain control of both the proficiency tests and the curriculum by a single organization. Each is interdependent on the other. Accordingly, project staff are urged to develop the curriculum materials and behavioral objectives so they are dependent on one another.

Recommendation 22

AMRA is to be commended for undertaking probing research of a sensitive area such as the roles and functions of people in their field. Such research frequently dispells many of the fervently held beliefs or biases of association staff or individuals in the field. Thus, AMRA policy level staff are urged to initiate proactive leadership strategies whereby the research results will be implemented.

SUMMARY

The twenty-two recommendations contained in this report are provided for purposes of program improvement. The extent to which they are implemented is dependent upon project staff, AMRA and staff of DHEW.

In any evaluation there is the danger that because recommendations are made, there must be "problems" with the project. Clearly this is not the case with Roles and Functions Project. The project has been well planned, is being professionally conducted and should result in a significant contribution to the allied health occupations in general and the medical records field in particular.

Resume of:

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EDUCATION

Ed.D.	Vocational Education (Major) Adult Education (Minor) Industrial Education (Minor)	University of California at Los Angeles
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CREDENTIALS

General Administrative and Supervision, California -- #GS-7104
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PROFESSIONAL EXPERIENCE

8/71 - Present	California State Department of Education, Vocational Education Section DIRECTOR, VOCATIONAL-TECHNICAL EDUCATION CURRICULUM LABORATORY and DIRECTOR, PUBLIC SERVICE OCCUPATIONS CURRICULUM PROJECT.
8/69 - Present	Education and Training Services, Inc., Carmichael, California PRESIDENT
9/69 - 8/71	University of California, Los Angeles, Division of Vocational Education RESEARCH SPECIALIST
1/68 - 9/69	SENIOR TRAINING SPECIALIST SITE DIRECTOR
5/66 - 4/68	United States Peace Corps ASSOCIATE DIRECTOR
4/64 - 4/66	Litton Industries - Educational Systems Division CURRICULUM DIRECTOR SENIOR CURRICULUM SPECIALIST
7/64 - 8/65	University of Maryland, College of Home Economics ASSISTANT PROFESSOR (Acting)
1963 - 1964	Montgomery County, Maryland Public Schools TEACHER (High School)

CONSULTANCIES AND PART - TIME POSITIONS

1973 - Present	Southern States School Association, Atlanta, Georgia CONSULTANT
1973	Nevada State Department of Education, Carson City CONSULTANT
1971 - Present	Mountain Plains Region Education Association, Glasgow, Montana CONSULTANT

1972 - Present	Work Experience Programs, Gregg Division, McGraw Hill, New York ADVISOR
1969 - Present	International Training, Development and Resources Corporation, Sacramento, California PART-TIME CONSULTANT
1972 - 1973	Colorado State University, Fort Collins, Colorado CURRICULUM CONSULTANT
1970 - 1971	Programs Evaluation, Oregon State Department of Education, Salem, Oregon CONSULTANT
1971	International Training, Peperzak, Fuller Associates, Davis, California CONSULTANT
1964	Vocational Technical Education, U.S. Industries, Educational Science Division, Washington, D.C. CONSULTANT
1964 - 1965	Technical Education, Adler Educational Television, New York, New York CONSULTANT
1967 - 1968	Technical Teacher Education, University of Lagos, Nigeria PROFESSORIAL LECTURER
1967	Technical Education, International Labor Organization, the United Nations, Dakar, Senegal ADVISOR
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SCHOLARLY PAPERS AND PRESENTATIONS

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